



City of Madison Site Plan Verification

PROJECT: LNDSPR-2014-00187

Address: 1000 Edgewood College DR

Current Revision #: 0

Submitted by: Potter Lawson Inc.

Contact: Doug Hursh
(608) 274-2741
dough@potterlawson.com

Project Type: Permitted Use Site Plan Review

Description: Edgewood Campus Master Plan.

Status: Approved

Revision History: 0

Review	Status	Reviewer	Reviewed
Engineering Mapping	Approved	<u>Jeffrey Quamme</u>	Oct 31 2014
Engineering Review Main Office	Approved	<u>Timothy Troester</u>	Nov 4 2015
Fire Review	Approved	<u>William Sullivan</u>	Nov 5 2014
Parks/Forestry Review	Approved	<u>Sarah Lerner</u>	Nov 5 2014
Planning Review	Approved	<u>Timothy Parks</u>	Jun 5 2015
Traffic Engineering Review	Approved	<u>Eric Halvorson</u>	Aug 6 2015
Urban Design Commission Review	Approved	<u>Alan Martin</u>	Oct 27 2014
Zoning Review	Approved	<u>Jenny Kirchgatter</u>	Jul 17 2015

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ENGINEERING

Supplement Accepted**Comment Date: 11/13/2014**

Submit a PDF of the final plan for Engineering records. File(s) can be emailed to Tim Troester at ttroester@cityofmadison.com or submitted to City Engineering on CD.

Supplement Accepted**Comment Date: 11/13/2014**

The master plan work involved both redevelopment and new development work. Since the Edgewood Campus is one parcel all added impervious must be tracked. Once added impervious areas reaches 20,000 sf or more then new development requirements for runoff rate control, infiltration, sediment removal, and oil/grease treatment must be met for all added impervious areas. Keeping each individual building project below 20,000 sf added impervious area will not keep these requirements from being triggered. Update master stormwater plan to account for these requirements.

Supplement Accepted**Comment Date: 11/13/2014**

Sediment control for new development and redevelopment in this watershed is now 80% reduction due to phosphorous TMDL requirements. There are MEP caps for redevelopment in certain situations that can be found in Madison General Ordinance Ch 37. Update master stormwater report to account for 80% sediment removal requirements for new development and redevelopment (with the MEP factors in place). Include a watershed map or treatment area map as areas that generate pollutants and are allowed to bypass treatment have the potential to affect the overall pollutant removal efficiencies. Infiltration of clean water in the upland area will not provide as much pollutant removal as capturing and treating water from pavement areas in the built up campus area.

Supplement Accepted**Comment Date: 11/13/2014**

Oil & grease treatment must be provided for any new pavement parking / drive surface that is disturbed or added since the site as a whole already had more the 40 parking stalls. This is tracked on the property as a whole, not project by project. Update master stormwater management plan to account for this requirement.

Supplement Accepted**Comment Date: 11/13/2014**

Infiltration standard for new development is 90% (the 60% commercial no longer applies). The Waukesha County infiltration method calcs must be re-run in current version of WinSLAMM to show water quality and infiltration volumes.

Supplement Accepted**Comment Date: 11/13/2014**

Provide a stormwater management schedule that ties required amount of stormwater BMPs to the planned future building projects. Example: number of SF of infiltration/bioretention for a proposed building.

Note**Comment Date: 11/13/2014**

This area falls within the TMDL zone for the City of Madison. As a result, the campus will be subject to higher erosion control standards at the time of development, as authorized by State code and City resolution. Contact Tim Troester at 608-267-1995 or ttroester@cityofmadison.com for details.

Note**Comment Date: 11/13/2014**

When individual building/construction projects are routed for approval detailed stormwater management plans and calculations will need to be included to confirm the stormwater management requirements are being met.

Note**Comment Date: 11/13/2014**

In the event that stormwater management requirements change between the time the master stormwater management plan is approved and individual building/construction projects are approved – those projects must update their individual stormwater management plans to meet the standards in effect at the time of project approval.

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Note**Comment Date: 11/13/2014**

In the event that any future building additions or site improvements within the Edgewood Campus would increase traffic volume on any of the public streets adjacent to or serving the Campus, the applicant shall coordinate with the City Engineering Division and Traffic Engineering Division to provide any dedications necessary to accommodate any required street and traffic improvements.

Note**Comment Date: 11/13/2014**

Any additions or improvements within the Edgewood Campus that would impact Edgewood Drive (Park and Pleasure Drive) shall be approved by the City of Madison to assure conformance with any restrictions set out by the Park and Pleasure Drive easement and agreement documents.

Note**Comment Date: 11/04/2015**

Stormwater Management Plan Review and Approval Notes 11/4/15 TNT attached to this plan verification review.

PARKS FORESTRY**Note****Comment Date: 11/05/2014**

As previously approved by the Park Commission, Edgewood College will not be charged park impact fees for up to 300 additional residents as measured from the residential capacity at the time of the 1996 Edgewood Campus Master Plan. The number of residents in 1996 was 359.

Note**Comment Date: 11/05/2014**

Park impact fees (comprised of the Park Development Impact Fee per MGO Sec. 20.08(2) and the Parkland Impact Fee in lieu of land dedication per MGO Sec. 16.23(8)(f) and 20.08(6)) will be required for all future residential development as part of the campus plan. Park development impact fee credits have been fully utilized (see above). Currently an area in the northwest corner of the campus is identified as Athletic and Recreation Space on the 2014 Edgewood Campus Master Plan (243,064 sq ft). As long as this space remains as open recreational space for the campus, the parkland dedication requirement will continue to be met as previously approved by the Park Commission. Once these credits are exhausted, or if this space is utilized for other purposes, payment of parkland impact fees in lieu of dedication will be required.

Note**Comment Date: 11/05/2014**

Park impact fees will be determined when subsequent plans are submitted for review and approval. This development is within the Vilas - Brittingham impact fee district (SI27). Please reference ID# 14107 when contacting Parks.

Note**Comment Date: 11/05/2014**

Approval of plans for this project does not include any approval to prune, remove or plant trees in the public right-of-way. Permission for such activities must be obtained from the City Forester, 266-4816.

PLANNING**Note****Comment Date: 11/20/2014**

The final master plan appears to be consistent with the master plan approved by the Plan Commission and Common Council, including the conditions of approval.

Supplement Accepted**Comment Date: 11/20/2014**

Submitted by: Potter Lawson Inc.
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Project Type: Permitted Use Site Plan Review
Description: Edgewood Campus Master Plan.
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The final master plan document shall include a detailed survey of historic resources located on the campus overlaid on a land survey of the property prepared by a Registered Land Surveyor. The historic resources survey shall be approved by the City's Preservation Planner and shall serve as the official record of said resources going forward, replacing or superseding any such previous plans or documents. The preservation planner's review of the exhibit included with the final plan is pending.

NOTE: The information submitted on 13 May 2015 addresses this comment.

TRAFFIC ENGINEERING

Supplement Accepted**Comment Date: 11/07/2014**

Provide an electronic copy of the Master Plan, .pdf preferred, e-mail plan to Eric Halvorson -
ephalthorson@cityofmadison.com

ZONING

Note**Comment Date: 07/17/2015**

All relevant sections of the Zoning Code and Madison General Ordinances, which may be amended from time to time, shall apply to this Campus Master Plan, unless otherwise noted in the final approved Master Plan documents.

Note**Comment Date: 07/17/2015**

Per MGO Sec. 31.021(1)(a), this Campus Institutional zoned property shall have signage as allowed for Group 1 districts, primarily regulated by Sec. 31.14. Given the size, scale, number of buildings and shared relationship across the three distinct campuses, it is likely future signage needs will require approval as a Comprehensive Design Review (CDR) for signage, per Sec. 31.043(4).



Department of Planning & Community & Economic Development

Planning Division

Katherine Comwell, Director

Madison Municipal Building, Suite LL-100

215 Martin Luther King, Jr. Boulevard

P.O. Box 2985

Madison, Wisconsin 53701-2985

Phone: (608) 266-4635

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www.cityofmadison.com

April 22, 2014

Doug Hursh
Potter Lawson, Inc.
749 University Row, Suite 300
Madison, Wisconsin 53705

RE: Adopting a Campus-Institutional (CI) District Master Plan for Edgewood College, Edgewood High School and Edgewood Campus School, generally addressed as 2219 Monroe Street and 829-1000 Edgewood College Drive as an integral part of the Zoning Code (Maggie Balistreri-Clarke, Edgewood College).

Dear Mr. Hursh;

At its April 8, 2014 meeting, the Common Council **approved** a Campus-Institutional (CI) District Master Plan for Edgewood College, Edgewood High School and Edgewood Campus School subject to the conditions that follow. These conditions of approval shall be satisfied prior to the master plan taking effect and the issuance of building permits for any of the projects contained in the plan:

Please contact Janet Schmidt of the City Engineering Division at 261-9688 if you have questions regarding the following nine (9) items:

1. This area falls within the TMDL zone for the City of Madison. As a result, the campus will be subject to higher erosion control standards at the time of development, as authorized by State code and City resolution. Contact Tim Troester at 608-267-1995 or ttroester@cityofmadison.com for details.
2. This site, while partially a redevelopment, does not fully qualify for that category for stormwater management. City ordinances define redevelopment as removal of a commercial structure. Further, this site is subject to TMDL standards and must get 80% TSS control compared to existing conditions when taken on mass.
3. The proposed concept for stormwater management is innovative and supported, but details must be reviewed and approved by City Engineering.
4. In the event that any future building additions or site improvements within the Edgewood Campus would increase traffic volume on any of the public streets adjacent to or serving the Campus, the applicant shall coordinate with the City Engineering Division and Traffic Engineering Division to provide any dedications necessary to accommodate any required street and traffic improvements.

5. A width shall be specified for the Park and Pleasure Drive Landscape Buffer Zone shown on the Open Spaces Diagram.
6. The Public Water Main Loop under Edgewood College Drive and the Madison Metropolitan Sewerage District Sewer Interceptor shall be shown and identified on the Existing Conditions Map.
7. Any additions or improvements within the Edgewood Campus that would impact Edgewood Drive (Park and Pleasure Drive) shall be approved by the City of Madison to assure conformance with any restrictions set out by the Park and Pleasure Drive easement and agreement documents.
8. An erosion control plan and land disturbing activity permit shall be submitted to the City Engineering Division for review and approval prior to grading or any other construction activities. The Preconstruction Meeting for Public Improvements shall not be scheduled prior to issuance of this permit. The applicant shall demonstrate compliance with Section 37.07 and 37.08 of the Madison General Ordinances regarding permissible soil loss rates. The erosion control plan shall include Universal Soil Loss Equation (USLE) computations for the construction period. Measures shall be implemented in order to maintain a soil loss rate below 7.5-tons per acre per year.
9. Prior to approval, this project shall comply with Chapter 37 of the Madison General Ordinances regarding stormwater management. Specifically, this development is required to: detain the 2- and 10-year storm events; reduce TSS off of the proposed development by 80% when compared with the existing site; provide oil and grease control from the first 1/2" of runoff from parking areas, and; complete an erosion control plan and complete weekly self-inspection of the erosion control practices and post these inspections to the City of Madison website as required by Chapter 37 of the Madison General Ordinances.

Please contact Eric Halvorson of the Traffic Engineering Division at 266-6527 if you have any questions regarding the following five (5) items:

10. The City of Madison continues to receive complaints from residents and School Crossing guards regarding the difficulty crossing Monroe Street at Edgewood Avenue due to the offset geometry of the intersection. Realigning the east leg with the west Leg of Edgewood Avenue at Monroe Street would contribute to improved pedestrian safety and would encourage walking within the neighborhood, including for students of the Edgewood Campus. Realignment would also allow higher-level pedestrian or traffic improvements at the intersection that are currently not feasible. Given the many large growth mature trees within the area necessary to realign, realignment of the intersection in the short term is not likely. The plan shall include a long term goal of realigning the intersection to improve pedestrian safety and restrict new infrastructure or landscaping within the area necessary to properly realign the intersection.
11. The applicant shall submit one contiguous plan for approval. The plan drawing shall be scaled to 1" = 20' and include the following, when applicable: existing and proposed property lines; parcel addresses; all easements; pavement markings; signing; building placement; items in the terrace such as signs, street light poles, hydrants; surface types such as asphalt, concrete, grass, sidewalk; driveway approaches, including those adjacent to and across street from the project lot location; parking stall dimensions, including 2 feet of vehicle overhang; drive aisle dimensions; semitrailer movement and vehicle routes; dimensions of radii; and percent of slope.

12. The applicant shall post a security deposit prior to the start of future development. In the event that modifications need to be made to any City owned and/or maintained traffic signals, street lighting, signing, pavement marking and conduit/handholes, the developer shall reimburse the City for all associated costs including engineering, labor and materials for both temporary and permanent installations.
13. The City Traffic Engineer may require public signing and marking related to the development; the developer shall be financially responsible for such signing and marking.
14. All parking facility design shall conform to the standards in MGO Section 10.08(6).

Please contact Matt Tucker, Zoning Administrator, at 266-4569 if you have any questions regarding the following three (3) items:

15. All relevant sections of the Zoning Code and Madison General Ordinances, which may be amended form time to time, shall apply to this Campus Master Plan, unless otherwise noted in the final approved Master Plan documents.
16. The final master plan shall include a section with an analysis of the existing and proposed demand for bicycle parking facilities for the three campuses, including a phasing plan for how bicycle parking facilities will be upgraded/ implemented. This can be established through the Process for Approvals section (Section 4.5). The master plan shall include language that establishes required amount of bicycle parking facilities for on-site residents, be designed as *long-term* bike parking, and facilities for non-resident student/ employee/ visitor bike parking, designed as *short-term* bike parking. See MGO Sec. 28.141(11) and 28.211 for relevant definitions and requirements.
17. Per MGO Sec. 31.021(1)(a), this Campus Institutional zoned property shall have signage as allowed for Group 1 districts, primarily regulated by Sec. 31.14. Given the size, scale, number of buildings and shared relationship across the three distinct campuses, it is likely future signage needs will require approval as a Comprehensive Design Review (CDR) for signage, per Sec. 31.043(4).

Please contact Dennis Cawley of the Madison Water Utility at 261-9243 if you have any questions regarding the following item:

18. Note: All operating private wells shall be identified and permitted and any unused private wells shall be abandoned by the Madison Water Utility in accordance with MGO Section 13.21.

Please contact Bill Sullivan of the Madison Fire Department at 261-9658 if you have any questions regarding the following item:

19. Note: The Madison Fire Department does not object to the master plan provided that the subsequent projects comply with all applicable fire codes and ordinances.

Please contact Kay Rutledge of the Parks Division at 266-4714 if you have any questions regarding the following three (3) items:

20. Park impact fees (comprised of the Park Development Impact Fee per MGO Sec. 20.08(2) and the Parkland Impact Fee in Lieu of Land Dedication per MGO Sec. 16.23(8)(f) and 20.08(6)) will be

required for all new residential development, including dormitories. Park impact fees will be determined when subsequent plans are submitted for review and approval. This development is within the Vilas-Brittingham park impact fee district (SI27). Please reference ID# 14107.1 when contacting Parks Division staff about this site.

21. Section 4.3 of the Master Plan shall also include the Edgewood Drive Park and Pleasure Drive easement and amended agreement between Edgewood and the City of Madison, executed May 22, 1997, and amended December 26, 2008.
22. Approval of plans for this project does not include any approval to prune, remove or plant trees in the public right-of-way. Permission for such activities must be obtained from the City Forester, 266-4816.

Please contact my office at 261-9632 if you have any questions about the following items, including the revisions and conditions recommended by the Plan Commission on March 24, 2014:

23. Revise the master plan prior to final approval to provide a range in square feet for all of the proposed projects identified in the plan, including the proposed campus school and high school additions identified on pages 24-26. Where not indicated, the minimum and maximum number of floors for those projects shall also be provided.
24. The final master plan shall include a to-scale, dimensioned site plan for the entire campus that includes the minimum setbacks of any future buildings located along Woodrow Street or Edgewood Avenue as measured from the back of curb of those streets and the property lines to provide both reference points in the plan.
25. That the final text of Section 4.5 be approved by the Planning Division to address minor edits needed to the January 22, 2014 document on the operation and function of the Architectural Design Review Committee.
26. The final master plan document shall include a detailed survey of historic resources located on the campus overlaid on a land survey of the property prepared by a Registered Land Surveyor. This historic resources survey shall be approved by the City's Preservation Planner and shall serve as the official record of said resources going forward, replacing or superseding any such previous plans or documents.
27. That references to Edgewood (Park & Pleasure) Drive be consistent in the master plan narrative and maps.
28. That a table be included in the master plan body that details the number and location of parking stalls to be added or removed similar to the tables on page 22.
29. That the actions steps/ recommendations be pulled into the body of the master plan from the appendix.
30. That the Plan Commission representative and design/ planning experience references be removed from the neighborhood association representative vetting sub-section in Section 4.5 on page 61 of the plan body.

31. As part of its action on the Campus Master Plan, the Plan Commission approved the composition of the Architectural Design Review Committee in Section 4.5 but clarified that they did not wish to approve the individual members of that group.

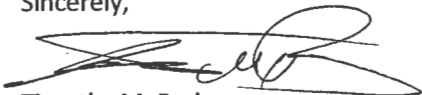
Specific questions regarding the comments or conditions contained in this letter should be directed to the commenting agency.

Please now follow the procedures listed below for obtaining permits for your project:

1. After the master plan has been revised to address any of the comments or conditions listed above, please file **ten (10) copies** of the final plan with the Zoning Administrator, Room LL-100, Madison Municipal Building, 215 Martin Luther King, Jr. Boulevard for circulation to the City department staff listed above for their final approval prior to the master plan taking effect. No building permits shall be issued until the plan has been revised to address the comments and conditions in this letter.
2. All buildings constructed within a CI district with an approved master plan shall be reviewed and approved by the architectural review committee approved by the Plan Commission. Said committee meetings shall be public.
3. No alteration of an approved Campus Master Plan, including changes to the proposed use of identified open space areas and other open space uses, shall be permitted unless approved by the Plan Commission, provided however, the Zoning Administrator may, following consideration by the alderperson of the district, issue permits for minor alterations that are approved by the Director of Planning and Community and Economic Development and are consistent with the concept approved by the Common Council. If the change or addition constitutes a substantial alteration of the original plan, the procedure in Sec. 28.097(2) is required.

If you have any questions regarding interpretation of the master plan or obtaining building permits in the future, please contact the Matt Tucker, the Zoning Administrator, at 266-4551. If you have any questions or if you may be of any further assistance, please do not hesitate to contact my office at 261-9632.

Sincerely,



Timothy M. Parks
Planner

cc: Janet Schmidt, City Engineering Division
Eric Halvorsen, Traffic Engineering Division
Matt Tucker, Zoning Administrator
Dennis Cawley, Madison Water Utility
Bill Sullivan, Madison Fire Department
Kay Rutledge, Parks Division

For Official Use Only, Re: Final Master Plan Approval Routing			
<input checked="" type="checkbox"/>	Planning Div. (T. Parks)	<input checked="" type="checkbox"/>	Engineering Mapping Sec.
<input checked="" type="checkbox"/>	Zoning Administrator	<input checked="" type="checkbox"/>	Parks Division
<input checked="" type="checkbox"/>	City Engineering	<input checked="" type="checkbox"/>	Urban Design Commission
<input checked="" type="checkbox"/>	Traffic Engineering	<input type="checkbox"/>	Recycling Coord. (R&R)
<input checked="" type="checkbox"/>	Fire Department	<input type="checkbox"/>	Other:



Edgewood Campus Master Plan

Madison, Wisconsin

January 20, 2014 – Original Document Submitted to the City Zoning for review

September 22, 2014 – Revised Document Addressing City of Madison Conditions of Approval

SITE PLAN APPROVAL	
(WIS. 25.18G)	
Address	1000 Edgewood College Dr
Permit #	LND SPR 2014-00487
Date Submitted	10/24/14
Original	<input checked="" type="checkbox"/> Revision #
Final Sign Off Date	11/6/15
Signature	Jessy Lunsford
Zoning Department, City of Madison, WI	

zoning

Edgewood Campus School
Edgewood High School
Edgewood College

829 Edgewood College Drive
2219 Monroe Street
1000 Edgewood College Drive





May 13, 2015

To: City of Madison Zoning Department

Re: Edgewood Campus Master Plan

Thank you for working with us to complete the rezoning of the Edgewood Campus from Conditional Use to Campus Institutional Zoning. We are submitting four copies of the Edgewood Campus Master Plan dated April 30, 2015. We believe this document to be the final iteration of the Master Plan, satisfying all City of Madison conditions of approval we have been made aware of.

The revisions to this document from the document submitted previously in September include the following additions as requested by Amy Scanlon, City Preservation Planner:

1. Table of Contents: Added Section 2.5 Map of Archeological Sites Inventory on Edgewood Campus
2. Page 12: Added description of Archeological Sites Inventory Map
3. Page 15: Added Archaeological Sites Inventory Map
4. Section A.5: Page 4, Item Number 26, added the Archeological Sites Inventory Map to satisfy this condition of approval.

No other changes from any of the other City departments were requested after our last submittal dated September 22, 2014.

Thank you for accepting the Master Plan documents; please let us know if you require additional information to finalize the change in zoning.

Sincerely,

Douglas R. Hursh, AIA, LEED AP
Director of Design

cc: Maggie Balistreri-Clarke - Edgewood College, Tim Parks – City of Madison Planning Department



December 3, 2015

To: City of Madison Zoning Department, c/o Jenny Kirchgatter, Assistant Zoning Administrator

Re: Edgewood Campus Master Plan

Thank you for working with us to complete the rezoning of the Edgewood Campus from Conditional Use to Campus Institutional Zoning. We are returning four copies of the Edgewood Campus Master Plan dated April 30, 2015. We have inserted the updated the Stormwater Management Concept Report section. We believe this document to be the final iteration of the Master Plan, satisfying all City of Madison conditions of approval we have been made aware of. We have left the cover sheet dated April 30, 2015 the same since as it has the original approval signatures from city staff.

The revisions to this document from the previous document dated April 30, 2015 include the following as requested by Tim Troester from City Engineering regarding storm water management:

1. Section A.3, Stormwater Management Plan Concept Report
 - a. Second Title Page: added "Revised August 2015"
 - b. Page 2: Infiltration Section has been modified
 - c. Page 4: First paragraph modified
 - d. Page 5: Potential Results; a column in the table has been added for required filtration areas
 - e. Page 6: Conclusion section; paragraph updated

No other changes from any of the other City departments were requested after our last submittal dated April 30, 2015.

Thank you for accepting the Master Plan documents; it is our understanding that this document is the final approved document.

Sincerely,

A handwritten signature in black ink, reading 'Douglas R. Hursh', followed by a horizontal line.

Douglas R. Hursh, AIA, LEED AP
Director of Design

cc: Maggie Balistreri-Clarke - Edgewood College, Tim Parks – City of Madison Planning Department

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BACKGROUND

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- 1.2 Historical Perspective
- 1.3 Master Planning Process
- 1.4 Master Plan Contacts
- 1.5 Mission and Guiding Principles
- 1.6 Longterm Strategic Goals

1.1 MASTER PLAN PURPOSE

The Campus Master Plan was undertaken to study how growth can be accommodated and managed so as to strengthen the special character of the Edgewood campus, and be sensitive to the impact that growth can have on the surrounding neighborhoods. The Edgewood Campus has been zoned "Campus Institutional", which requires that the campus have an approved master plan to meet the zoning requirements. This plan includes the requirements of a master plan as outlined by the City of Madison zoning ordinance.

Each campus institution, the surrounding neighborhoods and the Planning Department have reviewed the Campus Master Plan. It is an instrument of communication so that all stakeholders are aware of potential future developments on campus.

The Campus Master Plan establishes a direction for the future, while maintaining the flexibility needed to respond to changing needs, conditions, and resources. The plan is not intended to be a detailed blueprint for construction. Footprints for buildings, internal roadways, parking lots, and landscape elements shown on the Campus Plan are place holders for future development and refinement of each element.

The plan demonstrates how the many factors which influence the campus environment can be managed to create an attractive, understandable, and efficiently functioning whole.

The Campus Master Plan will provide a basis for implementing development decisions so as to benefit all three institutions and the neighborhood by:

- Creating a model academic environment for all three institutions
- Providing for the future growth of the Campus School, High School, and College in program and faculty enhancement
- Improving the quality of campus life
- Ensuring stewardship of land and financial resources
- Preserving the appropriate green space
- Ensuring compatibility of building height and use with neighboring buildings
- Providing for recreational needs
- Providing solutions for increased parking and traffic
- Setting forth an approval process for future development
- Providing solutions for mitigating neighborhood impacts of future development and growth



Campus Massing Model illustrating approximate future facility development in tan and existing buildings in white

1.2 HISTORICAL PERSPECTIVE

In 1881, Governor Cadwallader C. Washburn gave his Edgewood Villa and 55-acre wooded estate on the shore of Lake Wingra to the Dominican Sisters of Sinsinawa. They moved St. Regina Academy, which had been located in downtown Madison, to the Edgewood site. After a tragic fire in 1893, the Sisters rebuilt the school as Sacred Heart Academy, which was later separated into Edgewood High School and Edgewood Campus School.

In 1927, Edgewood College was founded as a junior college for women with a two-year liberal arts curriculum, housed in the same building as the high school. The senior college developed in 1940, focusing on the preparation of teachers, and the first Bachelor of Science degrees in education were awarded in 1942. Marshall Hall, originally built in 1864, was converted for use as a college residence hall in 1941–42, becoming the first distinctively collegiate building separate from the high school facilities.

In September of 2011, the presidents of Edgewood Campus School, Edgewood High School, and Edgewood College completed the process that established each as a separate legal entity. Historically, all three schools were, from a legal standpoint, under one 'umbrella.' Today, all three institutions remain under the sponsorship of the Dominican Sisters of Sinsinawa.



Grotto in 1921



Existing Grotto

Edgewood and Community

The Edgewood Campus School is committed to providing service to our campus and other communities. During the course of the school year, students in all grades participate in projects that benefit others. Starting in 6th grade students participate in two projects involving service work during the school year.

Edgewood High School has a strong history of high academic achievement among its graduates, many of whom have become business and civic leaders in the Greater Madison area. EHS students, faculty and staff contribute significantly to Madison and the surrounding areas through community service. All students are required to perform at least 100 hours of community service in order to graduate. 'Edgewood High School in the Community' is a day set aside each academic year. On these special days, the entire student body, faculty and staff put down the books to volunteer 3,500 hours serving community needs. This full day of service is a manifestation of the school's mission to educate its students in service and personal responsibility.

Today, Edgewood College educates more than 3,000 students annually, at a combination of our Monroe Street and Deming Way campuses, and online. Our graduates can be found serving, leading, and transforming our communities in every capacity. More than 73% of our 12,700 alumni remain in the greater Madison area, where they continue to draw on their experiences to help shape and enhance the quality of life in our communities.

Civic engagement is a vital part of how we prepare students for meaningful personal and professional lives, and we are nationally recognized for our community engagement. For the past five years, we have been named to the **President's Higher Education Community Service Honor Roll**, the highest federal recognition a school can achieve for commitment to service learning and civic engagement. Each year, Edgewood College students contribute more than 230,000 hours of service to the greater Madison community.

Edgewood College creates a 'brain gain' for the greater Madison area, by recruiting and educating talented students who continue to live and work here after they complete their studies. Currently, more than 55 businesses and organizations in the greater Madison area are owned by Edgewood College alumni.



1.3 MASTER PLANNING PROCESS

Process Overview

The master plan process was a collaborative effort with active involvement from five constituent groups: Edgewood Campus School, Edgewood High School, Edgewood College, Dudgeon Monroe Neighborhood Association, and Vilas Neighborhood Association. The 1997 Master Plan included a foundation document for the Edgewood Neighborhood Liaison Committee comprised of representatives from each of the five groups. This group has met regularly since 1997 and has guided the approval of updates to the 1997 Master Plan that accompanied each major building project since 1997.

The master plan process included internal planning and coordination among the three Edgewood schools, and a dynamic process of sharing information and discussion of issues with members of the two neighborhood associations as well as with the District 13 Alder, Sue Ellingson. The final master plan is the product of extensive engagement, collaboration and effort from all five entities. The following is a historical summary of the planning process.

Master Plan Updates 1998 - 2011

Updates to the 1997 master plan were included in the conditional use applications for all major building projects proposed from 1998 through 2010. These updates were accepted by the City of Madison Plan Commission through the approval of Dominican Hall in 2006. In 2011, in preparation for the conditional use application for The Stream, Neighborhood Liaison Committee members worked together to update the graphic map and building descriptions for the master plan. When presented to the Plan Commission the master plan update was rejected with the directive to develop a full master plan. The 2010 updated master plan graphic and accompanying narrative was presented to both Dudgeon Monroe and Vilas Neighborhood Associations in preparation for the development of the future master plan.

Agreement on Master Plan Process

A process for developing a new master plan was proposed to the Neighborhood Liaison Committee on April 18, 2011. Members approved the following process:

- A. Develop an internal approval process that ensures strong communication among the three Edgewood schools and outlines responsibility and authority to speak on behalf of all schools as appropriate.
- B. Choose a professional partner to assist with the Master Planning process and with developing maps and documents.
- C. Meet with City of Madison staff to review requirements for an updated Master Plan.
- D. Host a meeting to include: Liaison Committee members, Alders from Districts 10 and 13; neighborhood zoning committee members and other partners to develop a shared understanding and agreement on a Master Planning process. Clarify any expected changes that will come with a designated zoning of Edgewood Campus as Campus Institutional District.
- E. Develop a proposed Master Plan that is supported by all three Edgewood Schools.
- F. Work with members of the Liaison Committee to review updates to the Campus Master Plan, clarify issues and propose possible solutions to neighborhood concerns.
- G. Sponsor an open meeting to introduce a final draft of the Campus Master Plan to which all neighbors and interested community members would be invited.
- H. Meet with Dudgeon Monroe Neighborhood Association and the Vilas Neighborhood Association to request support for the Campus Master Plan.
- I. Submit Master Plan to the City of Madison for final approval.



Master Plan Meetings

In December 2012, Shawn Schey, Dudgeon Monroe Neighborhood Association representative and Maggie Balistreri-Clarke, Edgewood College representative, met to begin updating the 1997 Memo of Understanding to include current resolutions of past unresolved issues. That process continued until December, 2013. Please see Chapter 4.

In 2013, the Neighborhood Liaison Committee met as a whole committee 11 times. Two major sub-committees were formed to address the issues involving Site #1, the residence halls, and the buildings proposed for the east end of campus. These sub-committees met extensively from June through December 2013. Please see Chapter 3 for the resulting agreements that emerged from those meetings.

Two open public meetings were held to present plans and identify issues and concerns. The May 22nd meeting was attended by over 60 interested neighbors. The December 10th meeting was attended by 18 neighbors. Both meetings were jointly planned. Alder Sue Ellingson served as facilitator and host for both meetings. Keith van Lith from the City Planning staff provided additional expertise for the facilitation of the December 10th open meeting. The meeting included information stations on various aspects of the master plan.

Separate meetings to review plans and discuss issues were held with both neighborhood associations.

Several meetings with the City Planning staff were critical in providing guidance and advice for the master plan process. Of particular note is the meeting held on October 30, 2013, during which a new project approval process and a new architectural design review committee were created. Please see Chapter 4.

Development of the Agreements Chapter

Of special note is the creation of an 'Agreements Chapter' created to bring together three types of agreements: the updated memo of understanding, which addresses the unresolved issues from 1997; the reaffirmation and updating of agreements created since 1997, and the development of agreements that emerged from the 2013 master plan process. These agreements reflect countless hours of discussion, hard work and dedication on the part of engaged neighbors, the three Edgewood schools, the District 13 alder, and numerous professional consultants. Please see Chapters 3 and 4.



Open Meeting, December 10, 2013

1.4 MASTER PLAN CONTACTS

Edgewood Neighborhood Liaison Committee Membership and Resource People

2013 Edgewood Neighborhood Liaison Committee

Dudgeon Monroe Neighborhood Association
Shawn Schey, Daryl Sherman, Tom Huber

Vilas Neighborhood Association
Doug Poland, Jon Standridge, Tom Turnquist

Edgewood Campus School
S. Kathleen Malone, O.P.

Edgewood High School
Mike Elliott

Edgewood College
Maggie Balistreri-Clarke

Additional Master Plan Participants and Resources

District 13 Alder
Sue Ellingson

Dudgeon Monroe Neighborhood Association President
Sherwood Malamud

Vilas Neighborhood Association President
Julia Kerr

Dir. of Security, Parking and Transportation, Edgewood College
Mike Metcalf

Assistant Dir. of Parking and Transportation, Edgewood College
Erin Bykowski

Chief Financial Officer, Edgewood College
Michael Guns

Director of Facilities Operation, Edgewood College
Susan Serrault

SAA Traffic and Storm Water Consultants
John Lichtenheld
Marcus Fink

Potter Lawson, Inc.
Doug Hursh

City Planning Division Liaison
Tim Parks

1.5 MISSION AND GUIDING PRINCIPLES

The Edgewood Campus School states its mission, "In the Sinsinawa Dominican tradition, the Edgewood Campus School community guides a diverse student body toward becoming faith-filled global citizens who seek knowledge and truth."

Edgewood High School states as its mission, "Edgewood High School of the Sacred Heart, a Catholic high school, educates the whole student for a life of learning, service and personal responsibility through a rigorous academic curriculum that embraces the Sinsinawa Dominican values of Truth, Compassion, Justice, Partnership and Community."

The Edgewood College mission states, "Edgewood College, rooted in the Dominican tradition, engages students within a community of learners committed to building a just and compassionate world. The College educates students for meaningful personal and professional lives of ethical leadership, service, and a lifelong search for truth."



The Campus School



The High School Entrance



Edgewood College Expressing Values on Campus

1.6 LONG TERM STRATEGIC GOALS

Edgewood Campus School identifies three long term strategic goals: maintain the enrollment cap at no more than 325 students; monitor traffic and parking in the Edgewood Campus School parking lot to keep that environment safe; and care for the Campus School buildings and land.

In **Edgewood High School's** current strategic plan, four goals are identified, each with specific measures and indicators. The goals are educate, nurture and challenge students in an inclusive school community rooted in the Dominican tradition; establish long-term financial security; update Edgewood High School facilities with an emphasis on safety, increased accessibility and learning needs; strengthen internal and external relationships through effective communication.

Edgewood College identifies five strategic goals in its current strategic plan: Provide a distinctive learning environment based on the four essential characteristics of an Edgewood College education; retain and graduate students well-prepared for their next meaningful personal and professional steps upon completion; maintain moderate enrollment growth by both improving the quality of current programs and experiences and applying areas of strength to meet emerging community needs; achieve diversity commensurate with the diversity of Dane County and South Central Wisconsin, the primary communities we serve; and employ academic, financial, facilities, and operational models that meet current needs in ways that provide for the future.



2

EXISTING CONDITIONS

- 2.1 Existing Buildings and Land Use
- 2.2 Historic Sites and Landmarks
- 2.3 Site Survey with Indian Mounds
- 2.4 Site Survey with City Water Utilities

2.1 EXISTING BUILDINGS AND LAND USE

Edgewood Campus School, Edgewood High School, and Edgewood College share the 55-acre Edgewood campus. Each school is separately incorporated with its own administration and board of trustees. The schools of Edgewood work collaboratively in areas of curriculum planning, facilities, community relations, development, work-study student placement, community service, and teacher continuing education.

Two site plans show the existing conditions of the Edgewood Campus. The **Campus Plan – Existing Buildings** shows the existing buildings, drives, parking lots, Native American Mounds, and green space. The **Existing Conditions – Boundaries** site plan illustrates the site boundaries of each institution on campus. The institutions share access to the site and share facilities like the Edgedome, Sondregger Science Center, and the Marshall parking lot at the east end of campus.



Google Earth image from September 2014



- Existing Buildings
- Native American Mound



Campus Plan - Existing Buildings
Edgewood Campus Plan
 January 08, 2014



Existing Conditions - Boundaries
 Edgewood Campus Plan
 January 08, 2014

2.2 HISTORIC SITES AND LANDMARKS

The 55-acre campus shared by the three institutions is home to **Native American Mounds**, evidence that this has been a very special and beautiful place for centuries. Situated toward the shore of Lake Wingra, these mounds were the subject of an extensive survey conducted by the Great Lakes Archaeological Research Center. There are two 'markers' on campus, placed in 1915 and in 1919 that identify two of the sacred areas.

The **Edgewood High School Building** is a structure that dates to 1927, when it opened to serve as both the high school and as Edgewood Junior College. It was designed by Albert Kelsey, grandson of former Wisconsin Governor Cadwallader Washburn.



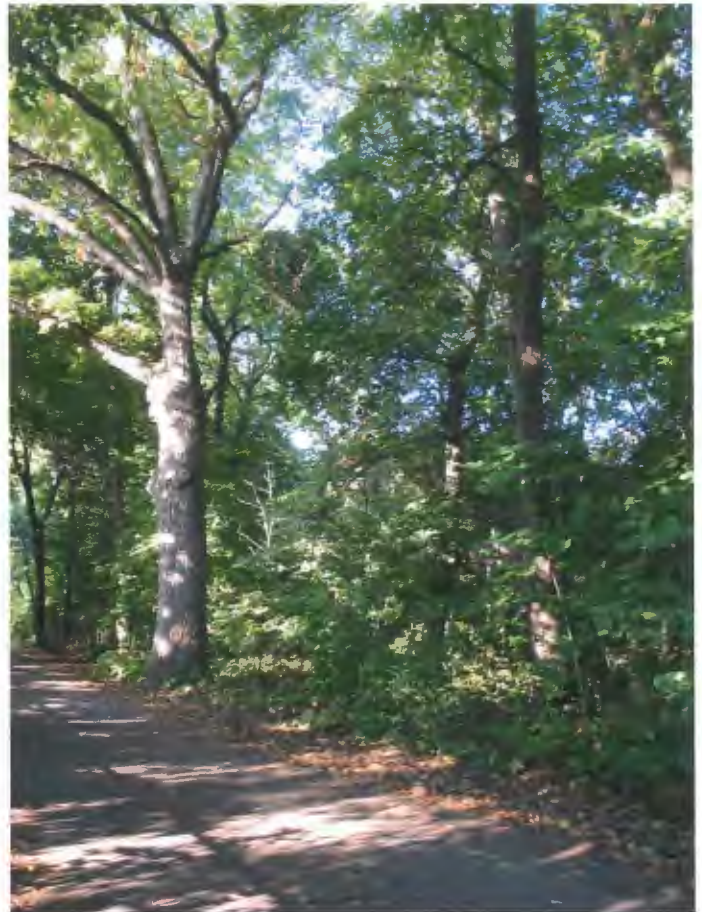
Edgewood High School

Marshall Hall is the oldest building on the 55 acres. Its construction dates to 1864. Originally built as a carriage house, it underwent significant renovations in the early 1940s and in 1942 became the first uniquely collegiate building on the Edgewood campus. Today it serves as an Edgewood College residence hall.



Marshall Hall

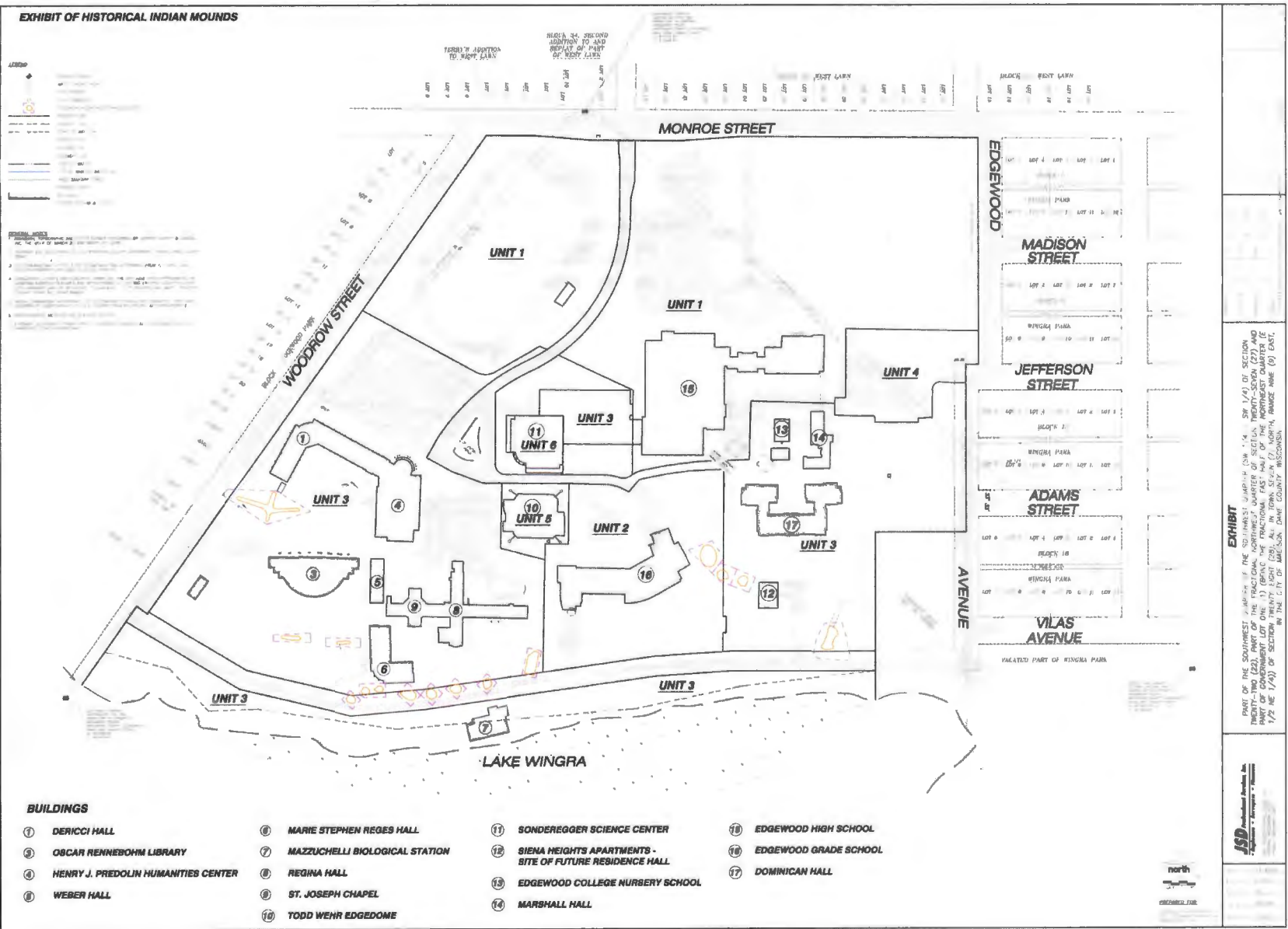
Edgewood (Park & Pleasure) Drive is a beautiful stretch of road that winds along the north shore of Lake Wingra, where the campus meets the lake. The Drive dates to the early 1900s. Today, it is a haven for cyclists, runners, and walkers. Autos may only enter and exit through the east. While emergency vehicles have full access from either Woodrow Street or Edgewood Avenue only, the Drive was closed to through traffic in 2006, concurrent with the construction of Dominican Hall, the newest Edgewood College residence hall.



The Park and Pleasure Drive

The Edgewood Oaks grace what is now the green space between the High School and Monroe Street. It is widely held that the trees date to when Native American peoples accessed the land for hunting and fishing. Samuel Marshall, for whom Marshall Hall is named, was the owner of the property before selling it to Governor Washburn. Marshall, an amateur arborist when he wasn't building the Marshall & Isley Bank, planted many more trees on what is today a beautiful home to three institutions.

SITE SURVEY WITH INDIAN MOUNDS



3

PROPOSED CONDITIONS

- 3.1 Future Needs of Campus Institutions
- 3.2 Campus Plan
- 3.3 Setbacks Diagram for Perimeter Buildings
- 3.4 Site One Diagrams and Agreements
- 3.5 Residence Halls and Buildings 14 & 16 -
Diagrams and Agreements
- 3.6 Architectural Guidelines
- 3.7 Phasing Plan
- 3.8 Open Space Plan
- 3.9 Sustainability
- 3.10 Transportation Plan
- 3.11 Stormwater Management
- 3.12 Bicycle Parking Plan

3.1 FUTURE NEEDS OF CAMPUS INSTITUTIONS

Edgewood Campus School identifies maintaining an enrollment cap at no more than 325 students as one of its strategic goals. The School has also identified future projects to address space needs. They include enlargement of the existing library and computer lab; and expanding the Campus School building on the east side to include a larger music room, art room, small Chapel and a large multi-purpose room, kitchen and gymnasium.

Edgewood High School has, as a measure of the goal of 'establishing long-term financial security,' established its long term optimal enrollment at 725 students. Edgewood High School has identified six areas of focus in its current Strategic Plan related to space needs.

They include updating facilities with an emphasis on safety, increased accessibility and learning needs; by 2013-2014, complete the original commitment of \$750K for deferred maintenance priorities; ensure classrooms are continually renovated throughout the facility; ensure the effective use of technology is present in all facets of the high school; ensure the Facilities Master Plan is used as the basis for creating components of the next capital campaign; and ensure Edgewood High School understands its challenges and opportunities with regard to using external athletic facilities.

Edgewood College has identified five priorities related to space needs, to be addressed within the next ten years. As indicated in the chart below, Edgewood College is planning on a head-count of the Monroe Street campus of 2,660 students. The College is planning on a bed-count on the Monroe Street campus of 800.

Campus Population Summary

Population	Year 1994 ¹	Year 2005	Year 2012	Projected 10 Year	Optimal Capacity
Edgewood Campus School					
Students	265	304	275	300	325
Faculty & Staff	-- ²	30	30	33	33
Edgewood High School					
Students	535	594	593	650	725
Faculty & Staff	-- ²	88	106	125	125
Edgewood College					
Total Students	1,787	2,381	2,252	2,660	2,660
Total Beds	280	350	553	800	800
Faculty & Staff	-- ²	450	468	504	504

¹ Data obtained from Mead & Hunt Study (1995)

² Data not sited in study

Residence Halls

For the past three years, demand for residence hall space has exceeded capacity. Evidence indicates that retention increases when students live on campus for the first two years by improving the sense of community students experience. Further, when integrated with a well-conceived and executed transportation management plan as done for Dominican Hall, increases in residence hall capacity can reduce traffic counts on Monroe Street and other local streets.



Dominican Hall

College Resident Summary

Hall	Existing Beds	New Beds	Lost Beds	Net Additional Beds	Total Beds
Weber	33	0	0	0	33
Stevie	121	0	0	0	121
Regina	115	123	12	111	226
Regina/Fox	0	48	6	42	42
Dominican	205	0	0	0	205
Marshall	53	70-100	26	44-74	97-127
Siena	29	70-85	29	70-85	70-85
Totals	556	317	73	244	
Total Planned Maximum Residents					800

Regina Hall Remodel and Eastern Expansion

The Regina Hall HVAC systems are at the end of useful life and a cooling system does not exist. Problems with heating and cooling are serious concerns for Regina residents, based upon consistent student feedback. Combining HVAC systems for existing space with an addition to Regina for expanded residence hall space, currently the highest priority facilities project, would result in installation cost savings, reduced disruption (in comparison to completing the projects separately), and operational efficiencies going forward.



Rendering of Regina Hall Expansion

Athletics

Athletics and fitness space is lacking in a number of respects. First, the availability of the Edgedome is severely limited by the Shared Use Agreement with the Campus School, most days during the school year, college students have access only before 8:00 a.m. and after 4:00 p.m. This pushes practice times into the early morning and evening, leaving little time for use by non-athlete students or for individual use by student-athletes. While many students utilize the fitness center in the lower level of the Sonderegger Science Center, many others choose to pursue memberships at local health clubs at additional cost due to limited space and equipment; this increases both their living expenses and traffic to and from campus. Finally, securing appropriate sites for off-campus sports is exceptionally difficult. Track, tennis, and soccer programs all struggle to find appropriate sites for off-season training, in-season practice, and/or competition. Indoor practice facilities during the winter months do not exist for these sports or baseball. Multiple solutions, both on- and off-campus, will be necessary to meet these needs.

School of Business

The School of Business lacks adequate space to accommodate necessary curriculum changes and faculty growth. An updated undergraduate business curriculum calls for easily configurable, technologically advanced classroom settings that do not currently exist on campus. In addition, dedicated classroom space for state-of-the-art teaching experiences (such as telepresence and labs) for investment courses does not exist. Further space constraints limit opportunities for interdisciplinary teaching and research.

Music

The Music Department needs rehearsal and performance space on campus. Currently the department has two rooms in Mazzuchelli Hall that are safe in terms of their decibel levels, with good lighting, heating, cooling, ventilation, and humidity control. These rooms, however, are only 600 and 900 square feet, meaning that jazz ensembles barely fit into them, while other classes, such as drumming and concert band must be bused to MATC, requiring the rental of space, the transportation of students, and the transportation of equipment, which cannot be stored on site at rented locations.

St. Joseph Chapel is currently the only musical performance venue on campus. This is a problem for several reasons: (1) it must be converted from a worship space to a concert space and back again over 175 times a year, making scheduling problems prevalent and risking damage to equipment; (2) it is not acoustically designed for music, meaning that safe decibel levels are sometimes exceeded and performance quality compromised; (3) lighting is dim and external sounds bleed into the space; (4) the limited size of the space affects the ability to draw a substantial audience; (5) the absence of air conditioning and humidity controls adversely affects the equipment maintained on site; (6) the current ventilation system impairs the performers' ability to hear as well as affecting the quality of sound for the audience.



3.2 CAMPUS PLAN

The Edgewood Campus Plan Graphic has been a part of the Edgewood Campus Master Plan since 1996. It has evolved over time to respond to the needs of the three institutions as well as changes that have occurred to the natural environment, and input from the surrounding residential neighborhoods. It is not intended to be a detailed blueprint for construction. Footprints for buildings, roadways, parking lots and landscape elements shown on the graphic are placeholders to communicate areas that are planned for future development. Each element is intended to be refined during the detailed design phase and will be vetted through the architectural review process.

Proposed buildings on the perimeter of campus have been more defined in the master plan in order for the surrounding neighborhoods to understand the potential impacts of these buildings. These proposed buildings are noted with floor levels and floor area sizes. Proposed buildings that are more internal to the campus are less defined because the massing and bulk of these building sites have little impact on the neighborhood. Proposed buildings on the perimeter of campus include sites: 1, 7, 13, 14 and 16 and have additional graphic information including; massing models and street sections to illustrate massing and bulk. Additional narratives are included for these sites that describe agreements that have been negotiated during the master planning process between the Edgewood Campus and the neighborhood stakeholders. These documents follow the Campus Plan and are located in 3.3 Setbacks Diagram for Perimeter buildings, 3.4 Site One, 3.5 Residence Halls and Buildings 14 and 16.

The numbers below correspond to those on the **Campus Plan - Future Building** site plan that follows this list.

1. 80,000 sf facility with 2 levels of parking below
 - Building Uses:
 - Two parking levels with approximately 234 parking stalls with building program space above
 - Athletic and Wellness Facility
 - Performing Arts Facility
 - Classrooms and offices
 - Non-residential college uses
 - Refer to Site One building drawings for additional information on massing and height
 - Building Size:
 - Approximate Area: 80,000 sf
 - Height: See Site One Building drawings for information on massing and height

2. Addition to DeRicci Hall
 - Building Uses:
 - Non-residential college uses such as classrooms, offices, and other college functions.
 - Building Size:
 - Approximate Area: 12,000 sf
 - Number of Levels: 3 floors
 - Floor Plate: approximately 4,000 sf
 - Height: similar to existing building height
3. Library Addition, Two Levels
 - Building Uses:
 - Expansion of Library, and/or offices and classrooms
 - Outdoor patio spaces to the south
 - Building Size:
 - Approximate Area: 21,000 sf
 - Number of Levels: 2 plus a basement
 - Floor Plate: approximately 7,000 sf
 - Height: match existing building height
4. Chapel Addition
 - Building Uses:
 - Expansion of the existing chapel for use as a chapel, musical performance, music rehearsal space, gathering space and/or lecture hall
 - Building Size:
 - Approximate Area: 12,000 sf
 - Number of Levels: one level plus basement
 - Floor plate size: Approximately 6,000 sf
 - Height: match existing building height
5. Regina Western Addition
 - Building Uses:
 - Music rehearsal space, classrooms, and offices and/or additional residence rooms
 - Building Size:
 - Approximate Area: 7,900 sf
 - Number of Levels: 2
 - Floor plate size: 4,900 sf
 - Height: No higher than the existing building height
6. Regina Hall Dining Hall Expansion
 - Building Uses:
 - Dining hall, kitchen, serving area, meeting spaces, gathering and social spaces, classrooms, and outdoor terrace
 - Building Size:
 - Approximate Area: 15,000 sf
 - Number of Levels: One level plus basement
 - Floor plate size: 7,500 sf (floor plate and building area does not include exterior patio area)
 - Height: approximately as high as the second floor window sills

7. Regina Hall Eastern Addition

Building Uses:

- Residence Hall expansion
- Approximately 115 new beds
- Classrooms, offices and other college uses

Building Size:

- Approximate Area: 44,000 sf
- Number of Levels: 3 stories above grade plus a basement, and mechanical penthouse on the roof
- Floor plate size: 10,840 sf
- Height: similar to existing building height

8. Edgedome Renovation or New Facility

Building Uses:

- Performing Arts Facility, classrooms, offices, and other college uses

Building Size:

- Approximate Area: the area of this building will depend on the uses, a performing arts facility will have a smaller floor area and a larger volume, while office and classrooms may have the same volume with more floor area. The floor plate size is set by the available site area.
- Number of Levels: unknown
- Floor Plate Size: 23,000 sf
- Height: The height of the building will generally be no higher than the existing Sonderegger Hall. Approximately 76 feet above grade.

9. Sonderegger Hall Addition

Building Uses:

- Classrooms, offices, and other college uses

Building Size:

- Approximate Area: 27,900 to 37,200
- Number of Levels: 3 or 4
- Floor Plate Size: 9,300 sf
- Height: approximately the same height of the existing Sonderegger Hall

10. Campus School Addition

Building Uses:

- Classrooms, gym, cafeteria, chapel, offices

Building Size:

- Approximate Area: 30,000 sf
- Number of Levels: 1
- Height: additions to the south will match existing building height, the addition to the north will be taller to accommodate the gym function.

11. High School Addition

Building Uses:

- Offices, storage and maintenance

Building Size:

- Approximate Area: 6,750 sf
- Number of Levels: 2
- Floor Plate Size: 3,375 sf
- Height: match existing building height

11a. High School Addition

2 level expansion over existing one story commons area, first floor will have small addition, a screened rooftop mechanical area is anticipated over the existing roof

Building Uses:

- Cafeteria, kitchen, serving area, meeting spaces, gathering and social spaces, classrooms, offices and other high school uses

Building Size:

- Approximate Area: 15,250 sf
- Number of Levels: 2, plus small first floor addition
- Floor Plate Size: vary from 4,600 sf to 9,300 sf
- Height: similar to existing building height

11b. High School Core Addition

Addition of core elements including a new elevator to connect all floors for accessibility

Building Size:

- Approximate Area: 800 sf
- Number of Levels: connects to existing levels
- Floor Plate Size: 400 sf
- Height: Core would extend above highest floor to accommodate elevator overrun.

12. High School Addition

Building Uses:

- Fine arts, theatre storage, classrooms, lecture space and meeting rooms

Building Size:

- Approximate Area: 35,000 sf
- Number of Levels: 4
- Floor Plate Size: varies from 3,500 to 13,600 sf
- Height: similar to existing building height

13. Siena Hall Replacement

Building Uses:

- Replace existing Siena Hall Apartments
- Residence Hall expansion and other College uses
- Approximately 70 to 85 beds
- Classrooms and offices
- Non-residential college uses
- Refer to section 3.5, Siena Hall building site 13 drawings for more information

Building Size:

- Approximate Area: 46,500 sf
- Number of Levels: 3
- Floor Plate Size: Approximately 15,500 sf
- Height: 3 levels at approximately 12' each for 36' total, some variation may be encountered based on the sloping terrain and potential for peaked/sloped roofs

14. New Non-Residential Building

Building Uses:

- Non-residential college uses such as classrooms, offices and other college uses.

Building Size:

- Approximate Area: 54,000 sf
- Number of Levels: 3
- Floor Plate Size: 18,000 sf
- Height: see section 3.5 for massing and height diagrams

15. Marshall Residence Hall

Demolition of Boiler Plant building and Maintenance Storage Facility

Demolition of a portion of Marshall Hall, the stone historic portion will remain

Three level addition to stone portion of Marshall Hall

Building Uses:

- Residence Hall
- Approximately 97 – 127 total beds
- Classrooms, offices and other college uses

Building Size:

- Approximate Area: 33,000 sf (new portion)
- Number of Levels: 3
- Floor Plate Size: 11,000 sf (new portion)
- Height: similar in height to existing Marshall Hall, see massing diagrams

16. New Non-Residential Building

Building Uses:

- Classrooms, offices and other college non-residential uses.

- Exterior yard for storage and staging, facing campus

Building Size:

- Approximate Area: 12,000 sf
- Number of Levels: 2
- Floor Plate Size: 6,000 sf
- Height: See section 3.5 for height and massing information

17. Additional Parking

30 stalls

18. Revised Parking Layout for Campus School

- Adds approximately three stalls and provides more stacking room for Campus School pick up and drop off times

19. Revised Parking Layout at Siena Hall

- Existing parking lot will be relocated
- Parking count remains the same – 19 stalls

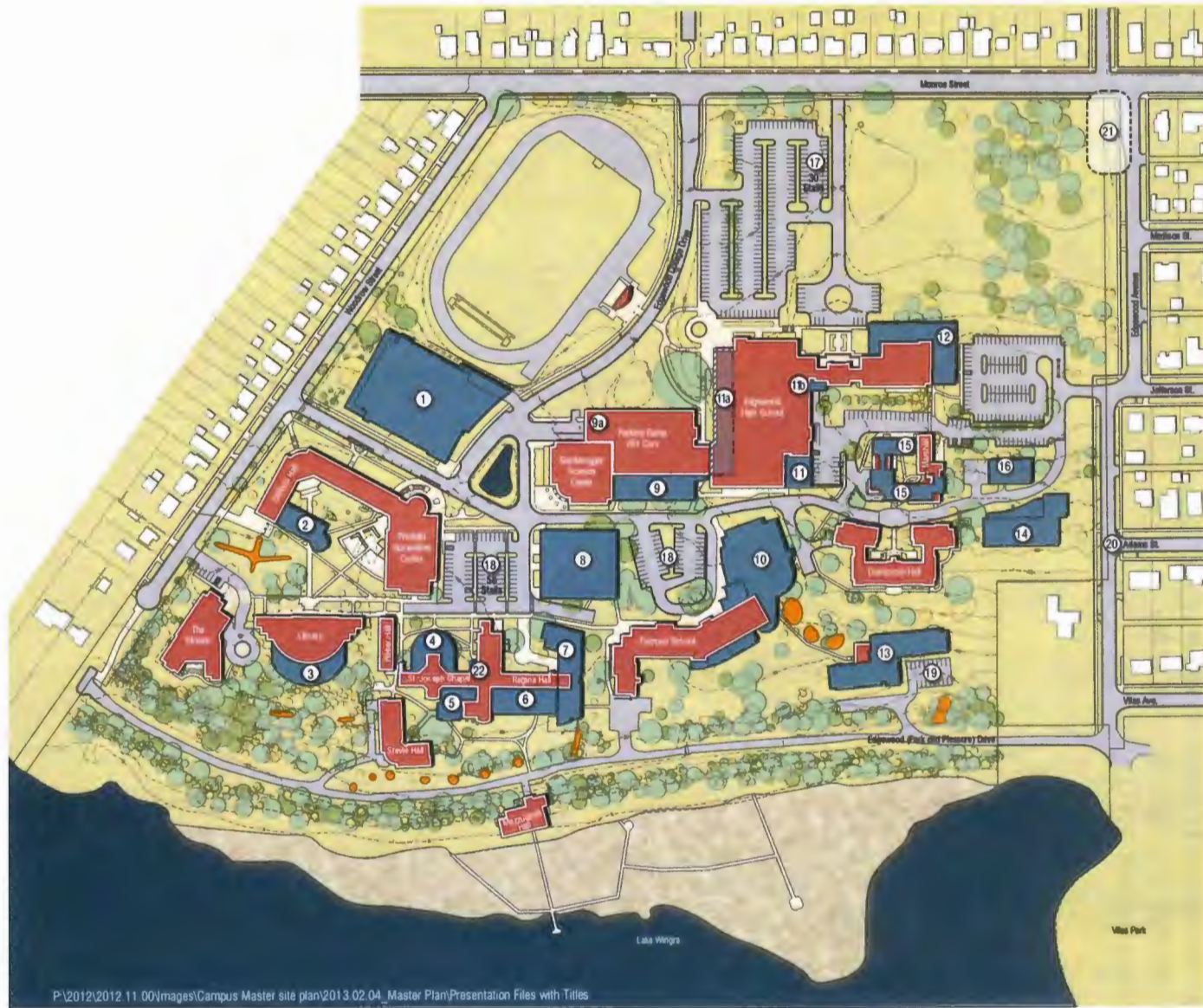
20. Existing Curb cut to remain

21. The master plan does not call for any future infrastructure or landscaping that would preclude discussions between the City of Madison and Edgewood High School for possible use of a portion of this area to be used for future realignment of Edgewood Avenue and Monroe Street.

22. New entrance vestibule and stairway to Regina Hall.

Building Size:

- Approximate Area: 2,350 SF
- Number of Levels: 3 + Basement
- Average Floor Plate Size: 450 SF
- Height: Slightly taller than the existing Regina Hall



Potential New Buildings or Additions

1. Future Facility & Structured Parking
2. DeRicci Hall Addition
3. Library Addition
4. Chapel Addition
5. Regina Western Addition
6. Dining Hall Addition
7. Regina Hall Eastern Addition
8. Edgedome Renovation or New Facility
9. Sonderegger Addition
- 9a. Addition to Parking Structure
10. Campus School Addition
11. High School Southern Addition
- 11a. High School Expansion over Existing Common Space
- 11b. High School Core Addition
12. High School Eastern Addition
13. New Residential or Mixed Use to Replace Siena Hall
14. New Non-Residential Building
15. Marshall Hall Addition
16. New Non-Residential Building
17. Additional Parking
18. Revised Parking Layout
19. Revised Parking Layout
20. Existing Curb Cut
21. See Note 21 on Campus Plan Narrative
22. New Entrance to Regina Hall

- Existing Buildings
- 2010 Campus Plan Proposed Additions/Expansions
- Native American Mound

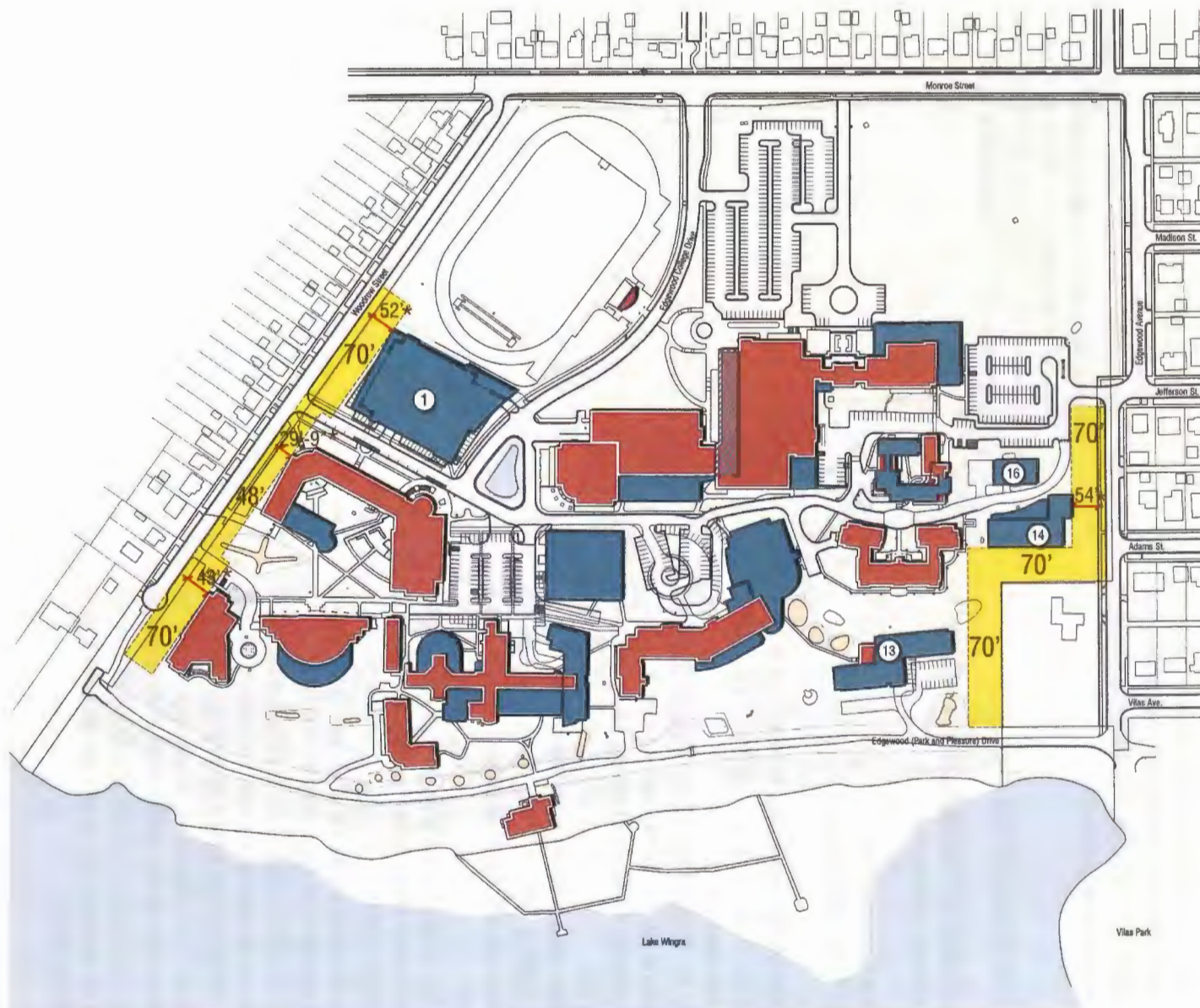


Campus Plan - Future Buildings
Edgewood Campus Plan
 September 18, 2014

3.3 SETBACKS DIAGRAM FOR PERIMETER BUILDINGS

The Perimeter Building Setback Diagram illustrates the existing and future buildings along Woodrow Street and Edgewood Avenue and the building setbacks from the street curb lines and from the Kubly property lines. Additional information about setbacks for Site One are included in section 3.4 Site One that include additional setback space as the building is set at an angle to the public street. A description of the perimeter buffer zones is located in section 3.8 Open Space Plan. The 70' set back allows for landscape screening of the future buildings along the public streets. An example of the 70 foot setback for new buildings can be seen at the recently completed "The Stream", the Visual and Theater Arts Center at the western edge of campus along Woodrow Street.

Perimeter Building Setback Diagram
Edgewood Campus Plan
 September 19, 2014



Perimeter Buildings

- ① **Future Facility & Structured Parking**
 Approx: 80,000 sf program space
 241 parking stalls on two levels
- ⑬ **Sienna Hall Replacement Residence Hall**
 Approx: 36,000 sf
 3 levels, facing south
 2 levels, facing north
 Potential for 70-85 beds
- ⑭ **New Non-Residential Building**
 Approx: 54,000 sf
 3 levels
- ⑯ **New Non-Residential Building**
 Approx: 12,000 sf
 2 levels

■ Existing Buildings
■ 2010 Campus Plan Proposed Additions/Expansions
■ Setback Area
 Note: Building set back dimensions are shown from the building edge to the face of curb at streets and to the property line at Kaby's property.
 * Dimension to Property Line



3.4 SITE ONE DIAGRAMS AND AGREEMENTS

Introduction

The Master Plan calls for new construction at Site One, which is currently a surface parking structure that is adjacent to Woodrow Street at the western edge of campus. The facility to be constructed in the future is proposed to have two levels of structured parking along with approximately 80,000 square feet of program space above the parking. The proposed uses could include an athletic and wellness facility. The following diagrams were used during the master planning process to communicate the massing, size, bulk, and setbacks of the potential future development. This section also includes a list of agreements created by the Liaison Committee to address issues raised by the neighborhoods.

Site One Building Bulk, Massing and Setbacks

This summary accompanies the following diagrams, please refer to the diagrams for additional information:

Site One - Site Plan at Woodrow Street
Site One - Woodrow Street Building Section

1. Building setbacks from the curb at Woodrow Street
 - a. From the South corner the building is set back 91 feet from the curb
 - b. From the North corner along Woodrow Street the building is set back 70 feet from the curb
 - c. The property line is approximately 18 feet from the curb line.
2. Building step backs from Woodrow Street
 - a. The building will have two levels of structured parking with two levels of building program space above.
The two levels of building program space above the parking levels are set back from Woodrow Street an additional 15 feet.
 - b. From the south corner the upper two floors are set back 104 feet from the Woodrow Street curb.
 - c. From the north corner of the building the two upper floors are set back 86 feet from the curb.
 - d. It is anticipated that a mechanical penthouse will be required. It is planned to be located toward the campus side of the facility away from Woodrow Street. The rooftop penthouse is anticipated to be set back an additional 261 to 283 feet from the curb at Woodrow Street.
3. Building Height
 - a. The site along Woodrow Street slopes. So the building height varies along this edge. The parking levels are built into the slope.
 - b. The parking levels are approximately 7 feet tall at the north end, and 16 feet tall at the south ends. These heights may be able to be reduced with additional berming.
 - c. The building program levels not including the penthouse or gymnasium are approximately 36 feet from the grade to the roof at the north end of the building and 45 feet from the grade to the roof at the south end along the Woodrow Street façade.



Bird's-Eye View of Existing Aerial

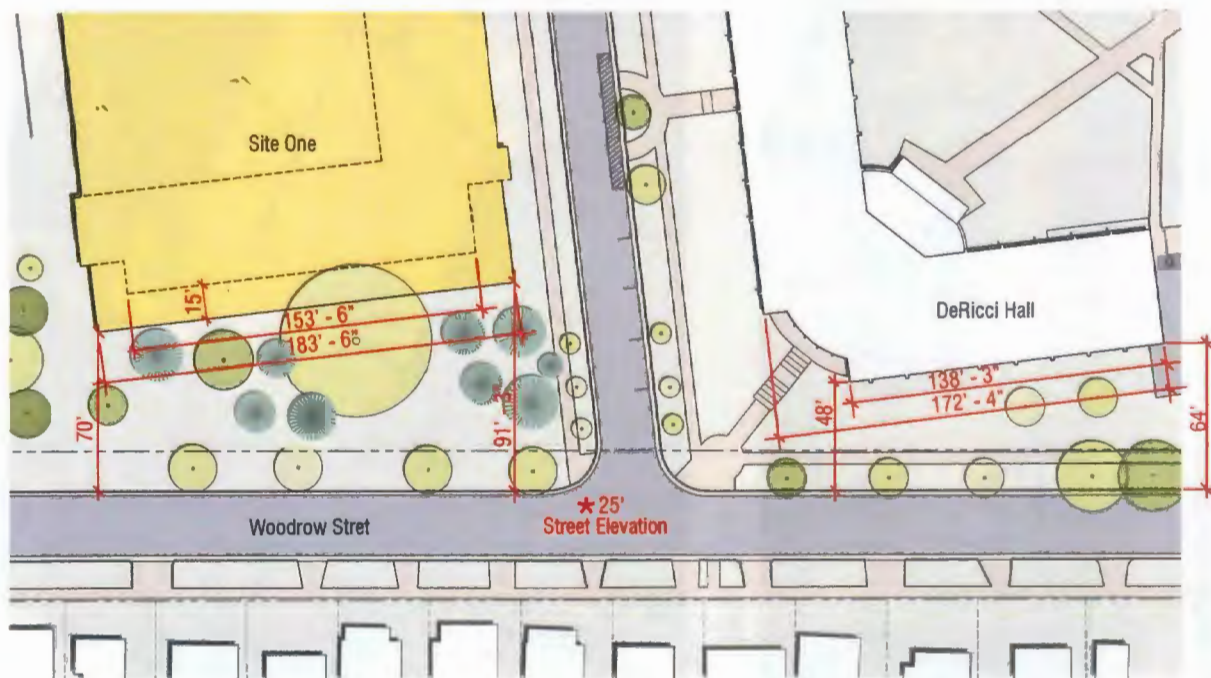


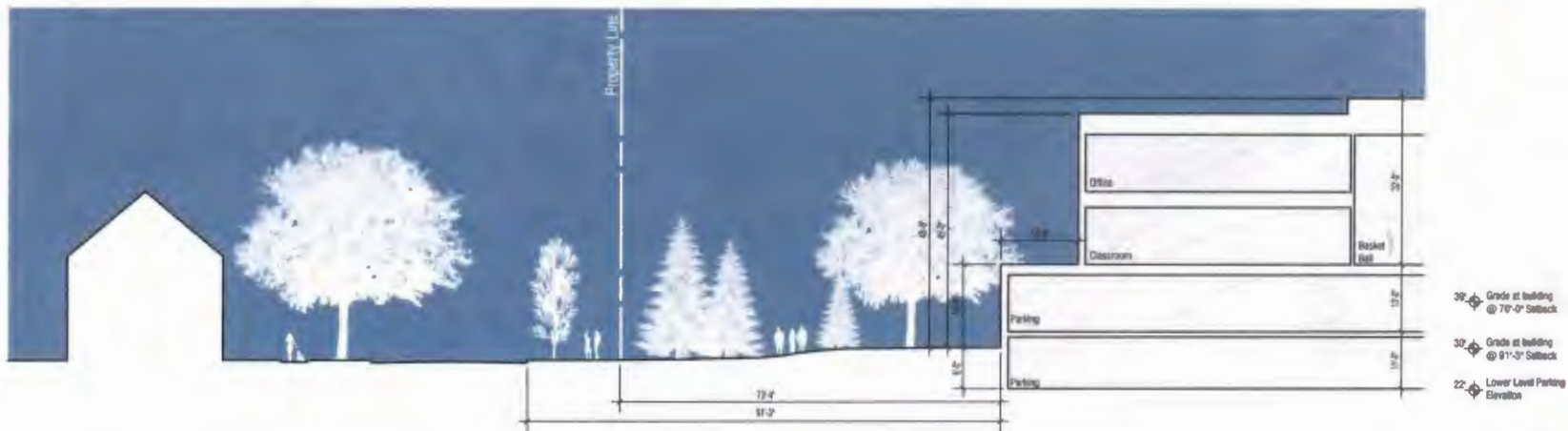
Bird's-Eye View of Proposed Site



Building Elevation Along Woodrow Street

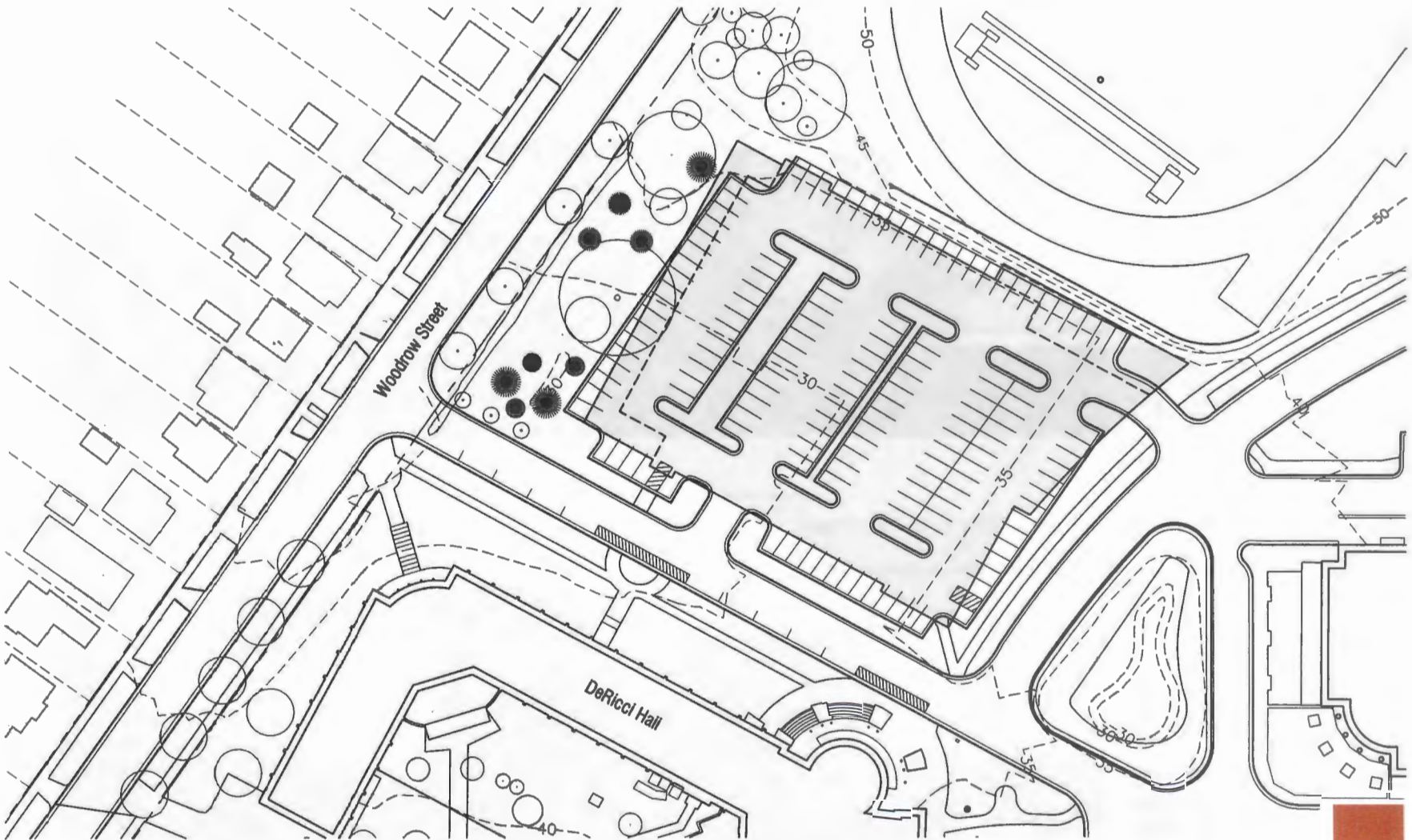
★ 25'
Street Elevation





Site One: Woodrow Street Building Section
Edgewood Campus Masterplan - 2012.11
 July 29, 2013





Site One: Site Plan - Comparison of Building Footprint to Existing Parking Lot
Edgewood Campus Masterplan
July 29, 2013



Site One Agreements

The following agreements created by the Neighborhood Liaison committee addresses issues raised in conjunction with the Site One plans.

- Angle the building (make it rectangular on the west facade).
- Step-back the building to soften impact on Woodrow
- Classrooms and offices on Woodrow side.
- Exterior façade of the parking structure shall be architecturally consistent with and indistinguishable from the rest of the building, i.e. it will not look like a building sitting on top of a parking structure.
- Enclose the section of the parking lot facing Woodrow Street.
- The interior and the lighting of the parking structure shall not be visible from Woodrow Street during both the daytime and the nighttime.
- Place parking ramp entrances and exits to both levels at the northeast corner of building.
- Locate the elevation of the lower level of the parking structure at or below the lowest grade at south side of the existing parking lot.
- Seating capacity for large events will not exceed 1,000 in bleachers; with capability for 600 chairs on floor.
- The dumpsters for Site One will be located within the underground parking structure.
- Create a parking plan for all three Edgewood schools to coordinate high attendance events and campus activities. Edgewood College events and parking staff will connect with a 3-school coordination group with strong communication to neighbors through liaison committee. Please see Chapter 3 for the Parking and Transportation addendum and High School Transportation Plan.
- Indicate "nonresidential" use for Site One
- Edgewood College will attempt to retain existing trees (with the possible exception of the largest deciduous tree) and will consider additional plantings in the expected buffer zone area between Woodrow Street and the building in spring, 2014. Edgewood College shall seek input from the neighbors regarding plantings to mitigate the building mass and visual impact; however the type and quantity of plantings shall be at the discretion of Edgewood College. The final landscape plan will be determined when the building is proposed.
- The storm water management plan depicts a bio swale in the northwest corner of Site One. With the understanding that this is a vegetated infiltration area and not a deep retention basin, the intent of the storm water management plan is to take reasonable steps to minimize the impact on existing trees.
- Develop and implement a rental policy statement for large spaces. See large space policy below.
- Currently, the athletic department requires all sports camp participants to be signed in and signed out of each practice or session by a parent or guardian. If an athletic facility is built at Site One, the athletic department is committed to maintaining this policy.
- Commit Edgewood schools to a master calendar and a single point person for coordinating large scale events to minimize parking in the surrounding neighborhood. See Chapter 3 for the Transportation Addendum plan and newly created high school parking and transportation plan.
- Develop approval process which incorporates neighborhood input for specific use of proposed building at Site One. The newly created Architectural Design Review Committee will use this Site One Plans and Processes Agreement for the development of Site One.
- Create and implement plan to direct large buses coming to campus to use the main entrance off of Monroe Street. This has been included in the Transportation Addendum.

To be addressed in future when specific use of building at Site One is proposed

- The Dudgeon-Monroe neighborhood representatives of the Liaison Committee will consult residents that live on Woodrow Street, the 2200-2300 block of Monroe Street and/or the 2200-2300 block of West Lawn, as well as Edgewood College, to review the effectiveness of the strategies outlined by the 2013 Transportation and Parking Plan and Parking Addendum, and to determine whether additional specifics on dissuading traffic are needed. For example, the Woodrow gate schedule will be reviewed to address the 2013 request for more hours of closure.
- Consider neighbor request to create a green roof at step backs.
- Consider neighbor request for possibility of doors on south side of building to be exit only.
- Consider placing a sign at the corner of Woodrow Street and Monroe Street facing eastbound vehicles directing traffic to the Central Drive if this proves necessary.
- Put in garbage contract the times of 7:00 am -7:00 pm, and central entrance to be used for pickup.
- Campus buildings require mechanical and electrical equipment; that equipment, as well as air inlets and outlets, make noise. Edgewood will take steps to reduce mechanical equipment noise that can be perceived by the neighborhood, by locating equipment away from the neighborhood. Reasonable steps will be taken to ensure that sound impact on the west side of Woodrow Street will not exceed existing night time ambient noise level in the neighborhood for comparable times.
- Ensure that parking ramp interior and lighting is not visible from Woodrow Street at any time.
- Finalize landscaping and storm water management plans for Site One.

LARGE SPACE RENTAL PLAN ADDENDUM

Any event that exceeds 100 people will be communicated to the Campus School, High School, and College to ensure that there is no overlap in events between the schools. These spaces include:

- The Edgedome
- Anderson Auditorium
- Sonderegger 108
- Washburn Heritage Room
- The Stream Atrium & Black Box Theatre
- Edgewood High School
- Edgewood Campus School
- Any outdoor space

Our current parking infrastructure allows space for 1,600 vehicles. Therefore, the "Three School- Event/Transportation Committee" will meet to determine if any school or the neighborhood will be impacted by an event.

Should a large event take place that could potentially affect the schools or neighborhood, the Committee will determine if it is feasible to host the event based on the following criteria:

- Overall parking availability
- Volume of campus events (all schools)
- Staffing
- Impact on other schools and neighborhood

If approved, communication will be sent through the Neighborhood Liaison Committee as a courtesy reminder

3.5 RESIDENCE HALLS AND BUILDINGS 14 & 16 DIAGRAMS AND AGREEMENTS

The Master Plan calls for up to 800 total residents on campus and for the construction of future buildings along Edgewood Avenue and one site that is along the Edgewood (Park and Pleasure) Drive. The following diagrams were used during the master planning process to describe the size, bulk and setbacks of the potential future development. This section also includes a list of agreements created by the Liaison Committee to address issues raised in conjunction with these plans.



Aerial view of east campus looking toward Lake Wingra. Proposed building numbers refer back to the Campus Plan – Future Buildings



Aerial view of Edgewood Avenue and eastern portion of campus



Aerial view of proposed buildings toward the eastern end of campus



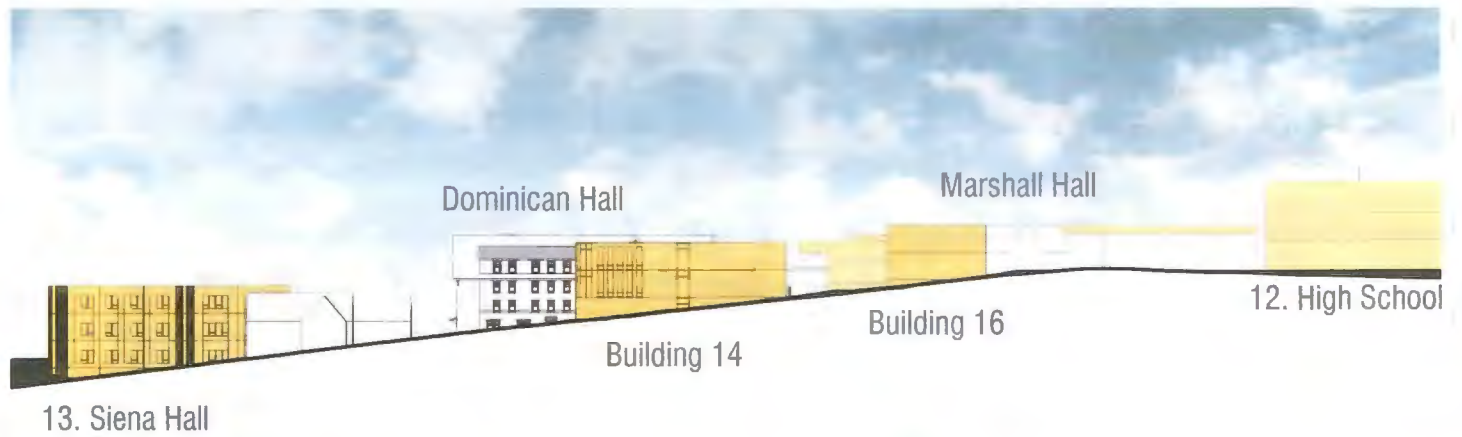
View of proposed new facilities



Aerial View from Edgewood Avenue



Street Level View north along Edgewood Avenue



Site Section



Aerial view looking north along Edgewood Avenue

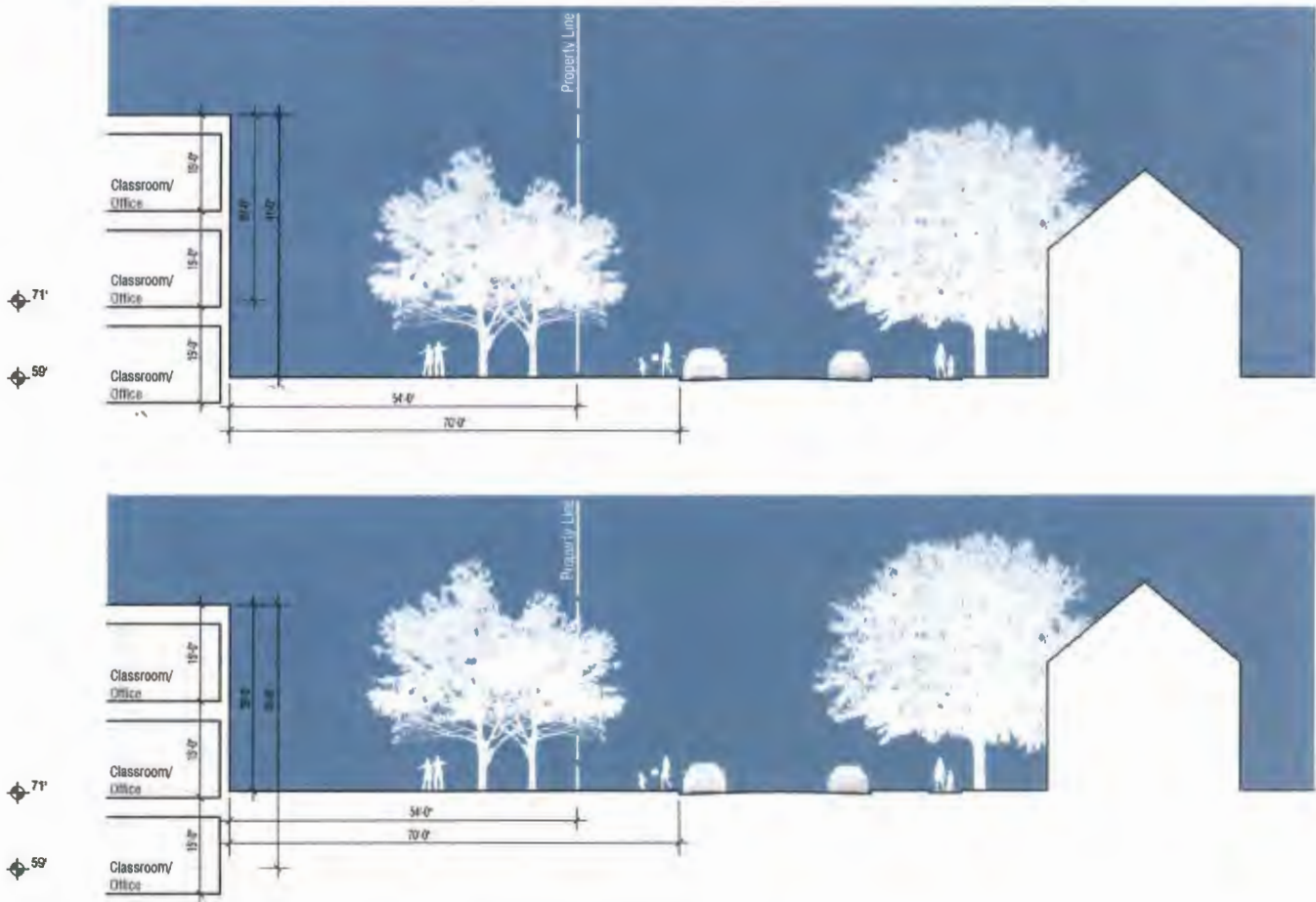
Existing Photos Along Edgewood Avenue



View down Adams Street toward Edgewood Campus



View Looking South on Edgewood Avenue, Edgewood property is on the right



Building 14: Edgewood Avenue Building Section
Edgewood Campus Masterplan - 2012.11
January 08, 2014

RESIDENCE HALLS AND BUILDINGS 14 & 16

Agreement Documents

These agreements are based on the following documents included in this section.

- Campus Plan
- Future Building Summary
- Parking Plan
- Architectural Guidelines
- Setbacks
- Residence Hall Counts and Perimeter Sites

Document dates referenced are the most current version and are subject to final approval of the Campus Master Plan.

Residence Halls

Residence halls will only be built on sites indicated in the Master Plan approved by the City of Madison and used only for the purposes identified in the New Building Summary. See documents Campus Plan and Future Building Summary.

Edgewood will continue to work with the neighborhood alder and Liaison Committee to manage noise and traffic. For example, the effectiveness of current strategies designed to mitigate noise and traffic will be reviewed and augmented as needed.

Specifics of the new design of the east extension of Regina Hall have not yet been provided to the Vilas Neighborhood Association (VNA). Edgewood will update and consult the VNA as they become available.

Design and massing of the new buildings will be consistent with the architecture of current campus buildings, and be reflective of the natural setting of Edgewood (Park & Pleasure) Drive and the residential character of nearby residences as outlined in the document Architectural Guidelines.

Building Entrances

To the extent supportive of strategies to mitigate noise and manage traffic patterns, Edgewood will make reasonable efforts to orient building entrances and public outdoor spaces and paths, toward the internal campus and away from Edgewood (Park & Pleasure) Drive, the Kubly residence, and Edgewood Avenue Garage entrances and buildings housing vehicles will face away from the campus perimeter.

Neighbors would like to emphasize their request that building entrances face away from the campus perimeter.

Setbacks

Building setbacks from the Kubly residence lot line and the western curb line of Edgewood Ave are as shown on the document **Perimeter Building Setback Diagram**.

Siena Parking Lot

Should the Siena location be expanded for student residences, a gate controlling vehicular traffic will be installed at the parking lot entrance to the new Siena hall. Access to the gated Siena parking lot will be restricted to users of the reserved parking spaces and other College access needs including, but not limited to, move-in and move-out days and for fire access and maintenance. The gate will remain closed and will be opened only to permit use as identified above.

The VNA requests that Edgewood consider connecting the Siena parking lot to the central drive rather than Edgewood (Park & Pleasure) Drive.

Dumpsters and Service

Location of dumpsters and hours of dumpster servicing shall be established to minimize negative impact on the neighborhood and will be restricted to between the hours of 7:00 am and 7:00 pm. Edgewood will make reasonable efforts to place dumpsters toward the interior, campus side of the buildings.

If outdoor storage, service, or loading areas are visible from adjacent residential uses or an abutting public street or walkway, the area shall be screened.

Green Strip Buffer Zone – East End of Campus

The east end of campus neighborhood buffer zone is a "green strip" intended to mitigate the visual, light and sound impact of new building development. This neighborhood buffer zone is depicted along Edgewood Avenue and adjacent to the Kubly residence property boundary in the slide on Open Green Space in the document Residence Hall Counts and Perimeter Sites. Please see Chapter 3, Open Spaces Diagram.

The neighborhood buffer zones as shown on the open spaces plan marked with a number 4 are located around the perimeter of the campus facing the neighboring public streets. The intention of the buffer zones is to provide space between future and existing campus buildings and the neighboring houses. The emphasis of the buffer zone landscaping is to provide visual screening of the college buildings from the neighboring houses.

Plantings are expected to include a variety of species such as evergreens and deciduous plantings with upper story and lower story screening. While the buffer zones are roughly the width of the building setbacks, opportunities for planting can only occur in a portion of the zone based on proximity to buildings and roads. It may be advantageous to provide storm water retention and filtration areas in the buffer zones. This can be accomplished as long as there is adequate space for both storm water and landscape screening to coexist.

Edgewood College will attempt to retain existing trees and will consider placing additional plantings in the expected buffer zone. Edgewood College shall seek input from the neighbors regarding plantings of sufficient size to mitigate the building mass and visual impact. However the type and quantity of plantings shall be at the discretion of Edgewood College. The final landscape plan for the buffer zone adjacent to each building will be determined when the building is proposed in accordance with the Architectural Design Review Committee process. The College will consider installing such landscaping prior to construction.

Landscaping materials, construction materials, black dirt, firewood, logs, debris, trailers, equipment and mulch will not be stored permanently in the green space buffers between Siena and the Kubly property or along Edgewood Ave.

See #4 Buffer Zone on the Open Spaces graphic and Chapter 3, Open Spaces Diagram.

Paved Pathways and Walkways

Neighbors have requested that no paved pathways or walkways be placed within the buffer zone. Edgewood will take reasonable steps to accommodate this request and will consult with the Liaison Committee members before adding a paved walkway or pathway.

Lighting

Outdoor lights, security box lights and other lights shall be carefully designed in conjunction with the 'green strip buffer zone' and placed to minimize glare and spillage onto Edgewood (Park & Pleasure) Drive, the woods and the boardwalk on Lake Wingra.

Lighting shall comply with City of Madison ordinances and the following architectural guidelines:

- a. Utilize dark sky compliant light fixtures.
- b. Provide lighting that is required for pedestrian safety and building code required exit lighting.
- c. Reduce glare and light spill towards the neighborhood, use lower height site lighting with non-glare and cut off shielding.

Neighbors have requested that the pole lights on both the east and west end of campus be turned off at 11:00 pm. Edgewood will take reasonable steps to accommodate this request. However, because lighting plays a critical role in securing the safety of campus, Edgewood will not agree to limit its ability to use lighting as a safety measure, but will agree to discuss the timing of lighting with the Liaison Committee.

Buildings 14 and 16

Please see the document **Perimeter Building Setbacks Diagram** for building setbacks from the Kubly residence lot line and the curb line of the Edgewood Ave.

Buildings 14 and 16 will be non-residential buildings. The permitted uses will be those listed in the document Future Building Summary.

Interior building lighting will be controlled to minimize spillage to Edgewood Avenue and the Kubly residence.

Hours of operation: classroom buildings are expected to be unlocked from 6:00 am until 10:00 pm Monday through Friday. On weekends, classroom buildings would be expected to be unlocked from 9:00 am until 5:00 pm unless an event is scheduled. Students would not typically have afterhours access without prior approval. Buildings housing Facilities Operations may be expected to be open around-the-clock throughout the week to accommodate the need for supervision of night staff and response to facility issues that occur in the evening hours.

Potter Lawson renderings of Buildings 14 and 16, particularly from the perspective of Adams Street and coming north on Edgewood Avenue are depicted in the document Residence Hall Counts and Perimeter Sites.

Driveways and curb cuts are depicted in the document Campus Master Plan.

Mechanical and Electrical Equipment Noise

For campus buildings requiring mechanical and electrical equipment, it is important to note that this equipment as well as air inlets and outlets will make noise. Edgewood will take steps to reduce mechanical equipment noise that can be perceived by the neighborhood by locating equipment away from the neighborhood. Reasonable steps will be taken to ensure that sound impact on Edgewood (Park & Pleasure) Drive, the Kubly residence, and Edgewood (Park & Pleasure) Drive will not exceed existing night time ambient noise level in the neighborhood for comparable times.

3.6 ARCHITECTURAL GUIDELINES FOR PERIMETER BUILDINGS

Goals

Provide quality facilities that meet the needs of the campus institutions while taking into consideration the concerns of the surrounding single-family residential neighbors along the perimeter of the campus.

Strategies and Guidelines

1. Massing
 - a. The buildings on the campus are inherently larger than the single-family homes across the street. The buildings can take advantage of topography changes by building functions into the hill and below grade to reduce the height of the buildings.
2. Modulation
 - a. Break up long facades to reduce large areas of one material
3. Materials
 - a. Strengthen the sense of place and continue to define the campus by utilizing materials that have already been used on the campus
 - b. New types of materials can be used to complement the existing materials on campus
 - c. Brick Masonry: Use similar light colored brick to blend with other campus brick
 - d. Rough Stone: similar to Marshall Hall and the Campus School
 - e. Limestone or cast stone window sills and trim: Similar to Predolin Hall and the High School
 - f. Residential Cement Board Siding: Used at Mazzuchelli and The Stream
 - g. Flat roofs, sloped roofs – residential shingles and metal roofs



Predolin Hall

4. Entrances

- a. Consider orienting entrances toward the campus and towards Monroe Street versus toward the neighborhood streets of Woodrow Street and Edgewood Avenue in order to encourage student pedestrian activity within the campus versus toward the edges of campus and toward the neighborhoods.
- b. Entrances will be necessary facing Edgewood (Park & Pleasure) Drive.



The Stream at Edgewood College

5. Windows

- a. Reduce glazing toward the neighborhood for buildings that will stay open late at night, similar to the Stream, in order to reduce light spillage from the buildings toward the neighborhood at night.
- b. For buildings that do not have late operating hours, windows that face the neighborhood are preferred to help break up the exterior facades.

6. Landscape buffers

- a. Provide landscaping in the setbacks to help to screen the new buildings along the perimeter of campus.
- b. Include a variety of species that include evergreens and deciduous plantings with upper story and lower story screening. The emphasis of the perimeter landscaping is to provide visual screening of the college buildings from the neighboring houses.

7. Site and Building Lighting
 - a. Utilize dark sky compliant light fixtures
 - b. Provide lighting that is required for pedestrian safety and building code required exit lighting. Reduce glare and light spill towards the neighborhood, use lower height site lighting with non-glare and cut off shielding.
8. Mechanical and Electrical Equipment Noise
 - a. Campus buildings require mechanical and electrical equipment; that equipment as well as air inlets and outlets will make noise. Edgewood will take steps to reduce mechanical equipment noise that can be perceived by the neighborhood, by locating equipment away from the neighborhood. Reasonable steps will be taken to ensure that sound impact on the west side of Woodrow Street will not exceed existing night time ambient noise level in the neighborhood for comparable times.
9. Trash Dumpster and Loading Areas
 - a. Locate dumpsters, outdoor storage and loading areas to minimize impacts on the neighborhood.
 - b. If trash, outdoor storage, and loading areas are visible by adjacent residential uses or public streets, provide visual screening.
10. For parking structures that are below buildings on the perimeter of campus, the parking structure façade will be integrated into the design of the building above by utilizing the same materials on both the building and parking facades.



Mazzuchelli Hall



Edgewood High School



Campus School

3.7 PHASING PLAN

Edgewood College is in the process of submitting a Conditional Use application for the Regina Hall Remodel and Eastern Expansion. Construction for the Regina Hall expansion is proposed to begin in May of 2015 with completion scheduled for August of 2016. No other building projects, for any of the three institutions, are being pursued as of the submission of this Master Plan.



Massing model illustrates the Regina Hall eastern addition

3.8 OPEN SPACE PLAN

The natural environment of the campus is one of Edgewood's greatest assets. Situated on the shores of Lake Wingra, with extensive wetlands, heritage trees, natural woodlands and Native American mounds, the 55-acre campus abounds with natural areas for students and the public to enjoy. Edgewood has been committed to the stewardship of this special land since 1881. While the campus requires modest future growth of its built environment, this growth is balanced with a commitment to dedicating green and open space for recreation, storm water management and providing a perimeter buffer zone for landscape screening.

The following list accompanies the **Open Spaces Diagram** and describes current open spaces shown on that site plan:

Open Spaces

1. Athletic field owned by Edgewood High School. Used for team practices, physical education classes.
2. Site of 'Edgewood Oaks,' owned by Edgewood High School. This area is a large green space with heritage trees planted by Governor Washburn in the late 1800's. The space is used as recreational space, physical education and athletic team practices.
3. Open space for snow removal management, storm water management and recreational uses.



Wetland Boardwalk at Mazzuchelli Hall

4. The neighborhood buffer zones as shown on the **Open Spaces Diagram** marked with a number 4 are located around the perimeter of the campus facing the neighboring public streets. The intention of the buffer zone is to provide space between future and existing campus buildings and the neighboring houses. The emphasis of the buffer zone landscaping is to provide visual screening of the college buildings from the neighboring houses. Plantings are expected to include a variety of species such as evergreens and deciduous plantings with upper story and lower story screening. While the buffer zones are roughly the width of the building setbacks, opportunities for planting can only occur in a portion of the zone based on proximity to buildings and roads. It may be advantageous to provide storm water retention and filtration areas in the buffer zones. This can be accomplished as long as there is adequate space for both storm water and landscape screening to coexist.



Park and Pleasure Drive

5. Edgewood (Park & Pleasure) Drive green space buffer between Edgewood Campus School and Edgewood College, and the Edgewood (Park & Pleasure) Drive. Several Native American Mounds are located within this buffer zone.
6. Lake Wingra shore lands; this natural area is accessed with pathways for campus and public use.
7. Native wetlands; Edgewood installs and maintains boardwalks that are used by the campus and the public for educational and recreational purposes.

8. Playground area for the Edgewood Campus School.
9. Native effigy mound: the Eagle Mound. Marked by plaque that dates to early 1900s, a significant landmark on the Edgewood College campus.
10. Courtyard on Edgewood College campus, outdoor seating is offered for college students, with a connection to the café in the Predolin Humanities Center.
11. Preserved woodlands on the Edgewood College campus. Home to contemplative spaces.
12. An open area of native effigy mounds, mapped during the work done by the Great Lakes Archaeological Research Center.
13. Storm water retention pond, with fountain. This storm water feature creates a focal point along the main entry to the campus.
14. Outdoor recreation area for Edgewood College students adjacent to the main dining space in Regina Hall, this area has outdoor tables and chairs along with a sand volleyball court.
15. Green space between the existing Dominican Residence Hall and the future Sienna Hall expansion. This green space has two storm water retention and filtration areas.



Playground Area at Edgewood Campus School



Courtyard at Edgewood College



Playground Area at Edgewood Campus School



Open Spaces Diagram
Edgewood Campus Plan
July 16, 2014

3.9 SUSTAINABILITY

Edgewood is committed to fostering campus sustainability that creates ecological, social, spiritual, and economic resiliency and abundance at our home on the shores of Lake Wingra. In 2006, Edgewood College became the first college or university in Wisconsin to be Green Tier Certified by the Wisconsin Department of Natural Resources for its exemplary environmental performance. From an operations standpoint, we are working to reduce energy consumption and increase efficiency in all facilities. In 2011 the college became a founding member of the Billion Dollar Green Challenge. We've committed a portion of the College's endowment to a revolving green loan fund to help finance energy efficiency upgrades. Recent accomplishments include two sustainably designed and constructed facilities. The LEED Silver Certified Dominican Hall was the first residence hall in the state to be LEED certified. Also, The Stream, the new visual and theater arts facility is pursuing LEED Gold level certification. The building includes a geothermal heating and cooling system that provides over 50% in energy costs savings. The site was very carefully chosen to preserve campus natural habitats, a beautiful 150 year-old oak tree, and an Native American bird effigy mound. The building features extensive natural lighting, a geothermal heating/cooling system, high-efficiency lighting fixtures, and rain gardens. Both buildings recycled more than 75% of construction waste, and go above and beyond required storm water measures to protect the Lake Wingra water quality. The College also purchases renewable energy and uses green cleaning products. Both the Campus School and the High School have made energy efficient upgrades including new mechanical systems, low water consuming fixtures, and energy efficient lighting.

Edgewood strives to improve sustainability in the natural environment by managing our woodlands and wetlands, preserving native species and improving storm water management. The campus institutions have worked together to create, install and maintain rain gardens. The rain garden projects serve as education for students and the community as well as effective and attractive storm water measures.



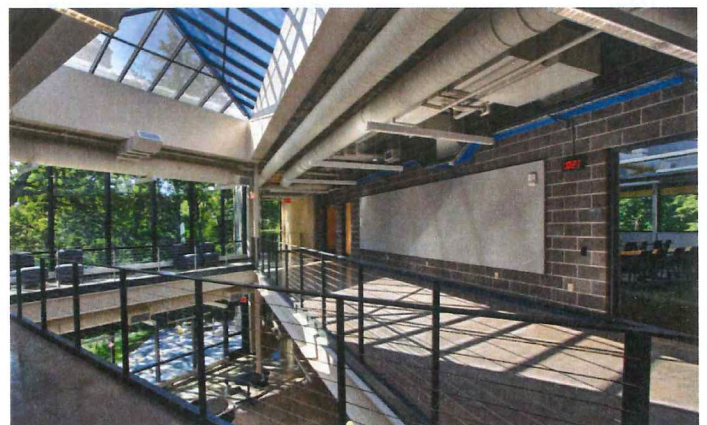
Rain Gardens at Campus School

Edgewood has a robust recycling program as well as the one of the most effective Transportation Demand Management Programs in the city. A full time transportation coordinator, oversees a program that provides van pooling, free Metro bus passes to encourage mass transit use, preferred parking for car pools, and shuttle buses to discourage students from bringing a car to campus. Participants in the Alternative Transportation Program earn gym discounts, personal time off, and free meals on campus. The plan has helped to reduce the need for cars on campus and reduced the impact of traffic and parking in the surrounding neighborhoods.

The College campus dining halls are Green Restaurant Certified and use an organic campus garden to supply a portion of their food. Edgewood College also maintains a revolving loan fund to encourage faculty, staff and students to submit proposals for financially self-sustaining sustainability projects.

The Campus provides education programs to encourage sustainability for future generations. An Environmental Studies minor is offered as well as a Sustainability Leadership Graduate program. The College holds events where the community can learn more about sustainability and conducts research on sustainable topics.

Sustainable attributes of the master plan include; increasing density on an existing urban site to reduce suburban sprawl, building over existing parking lots, and building structured parking in order to preserve green space and reduce the amount of space used for surface parking. Increasing the number of residential housing opportunities for students to live on campus has been shown to reduce the number of students who commute to campus, reducing our carbon footprint and reducing the number of car trips to campus each day. Storm water management plans include increasing the amount of water filtration and retention from current surface parking lots.



The Stream: LEED Gold certification

3.10 TRAFFIC AND PARKING

Proposed Transportation, Parking and TDM Recommendations

Edgewood College has committed to an aggressive TDM program to reduce vehicle trips and parking on campus. The addition of housing on campus will reduce the amount of site traffic that will be generated particularly during the peak hour. Given the adequate traffic operations currently experienced surrounding the site, these conditions will likely continue with the addition of the residence halls and the student population as shown in the Master Plan. The reduction in overall traffic both on Monroe Street and Edgewood Avenue also provide additional capacity for absorb campus growth. Finally, the Master Plan also shows the potential for adding more parking supply to the campus than will be created by the additional school enrollments further reducing the demand of off street parking.

Current and Future Parking Counts

Area	Available Parking	Future New Parking	Future Totals
A: West College Lot	146	95	241
B: Central College Lot	71	-	71
C: Central College Ramp	267	68	335
D: Edgewood College DR	9	-	9
E: DeRicci Hall Lot	3	-	3
F: The Stream Lot	6	-	6
G: Siena Hall Lot	19	-	19
H: High school Lot	17	-	17
I: High school Central Lot	183	30	213
J: High school Lot	18	-	18
K: High school Eastern Lot	58	-	58
L: Marshall Northern Lot	17	-	17
M: Marshall Western Lot	18	-	18
N: Campus Lot	37	5	42
Total	869	198	1067

Parking Measures

- *Increase remote parking for residents* – explore opportunities to expand off-campus parking to accommodate the projected growth in on-campus residents. Align shuttle service to accommodate needed resident access to their vehicle for work commitments and weekend trips.
- *Preferential car-free housing* – incentivize resident commitment to not having a car on campus by offering first choice of residential units on campus.
- *Additional parking*- the full build of the Master Plan is projected to increase the off campus parking demand by 161 parking spaces. The Master Plan shows the potential to add an additional 198 spaces as a part of future constructing. These new spaces include a 30 space addition to the high school parking lot near Monroe Street, a vertical expansion of the existing parking deck to accommodate another 68 spaces, the construction of a two story parking ramp over the existing Dericci surface lot with 95 additional spaces, and the reconfiguration of the Campus lot to accommodate another 5 parking spaces.

Transit/Shuttle Measures

- *Expand Metro pass program* – engage the Campus School and High School to participate in the free Metro pass program for its faculty, staff, and students. Explore cost implications and the feasibility of financing through parking or other existing fees.
- *Expand commuter shuttle* –shuttle ridership has increased since its introduction, and indications are that an east or south shuttle/parking location is needed. Additionally, the three schools should explore the possibility of accommodating faculty and staff at the high school and campus school on the shuttle, and/or offering the shuttle on Fridays.

Carpooling Measures

- *Free carpool permit* – consider offering a free parking permit to any car that agrees to carry 3 or more riders to park in designated carpool lots. Continue the reduced cost carpool permit for 2 riders.
- *Preferred carpool parking* – the high school has expressed an interest in offering “preferred parking” for students who choose to carpool.
- *Shared Car service* – explore the potential to host an on-campus shared car service, whether operated through a commercial provider such as ZipCar or as an institutionally owned and operated service. A shared car could be used by those who don't bring a car to campus

for incidental trips such as off-site meetings, personal appointments, etc.

Bicycling and Walking Measures

- *Bike Parking* – increase the availability and convenience of bike parking as the Master Plan is implemented. Consider providing covered bike parking to provide formalize and prioritize biker comfort and offer protection of bikes from the elements.
- *Lockers/Shower*s – provide dedicated lockers and showers accessible only to bicycle and other “human-powered” commuters.
- *BikeShare* – consider an on-campus shared bicycle service. This would work similarly to a shared car service (i.e., could be used for incidental trips). On some campuses, this type of program is run as a “recycle-a-bicycle” service, where individuals can donate a used bike to the institution which is then repaired as needed and offered for “check-out” by the campus population.
- *Bicycle Assistance Program* – provide conveniently located, free (or at least, inexpensive) bicycle maintenance, repairs, and parts on campus for bike commuters.
- *B-Cycle* – work with Madison B-Cycle to explore establishment of a B-Cycle station on campus. B-Cycle is a bike sharing service that allows users to check out bicycles for a certain period of time for a fee. Currently, B-Cycle has stations at Knickerbocker and Monroe and at Harrison and Monroe.



Other Measures

- *Incentive programs* – follow the college's lead and establish an incentive program for the high school and campus school populations.
- *Mopeds* – mopeds are becoming increasingly popular commute options, and take up much less “real estate” to park than do automobiles. Proactively provide convenient, safe, dedicated moped and motorcycle parking throughout the campus.
- *Hours/scheduling* – where feasible, offer flexible work schedules for staff and faculty throughout the campus to minimize peak traffic and parking demand, and consider balancing the college's class schedules (such as increasing the number of Friday classes). Coordination among schools with respect to special events, programming, and class scheduling must continue to be a priority in order to minimize spikes in parking and traffic demand to the extent possible.
- *Online learning/teaching* – especially at the college, on-line classes will only continue to increase in number and popularity. While there is no substitute for an in-person learning experience, some courses may lend themselves well to remote learning.



3.11 STORMWATER MANAGEMENT

Proposed Stormwater Master Plan Recommendations

Stormwater Management Concept:

Because of the layout of the campus and the proposed additions, the majority of the buildings are downslope, nearer the shores of Lake Wingra, adjacent to the existing high quality trees and documented Native American burial sites. There is much more open space on the upland side of the campus near the existing surface parking lots to address stormwater practices.

Acceptable, widely used stormwater practices for building additions generally place the stormwater feature (a bio-swale) in close proximity to the new construction that will capture the clean roof run-off and filter/infiltrate it.

Because of the Master Plan process and in order to gain a maximum in stormwater treatment effectiveness, this site lends itself to a more aggressive approach to stormwater management.

Instead of following current practices for placement of stormwater management facilities, the concept will be to take an equivalent area that would be required for the building additions and place it elsewhere on the site to maximize collection, treatment and infiltration. Roof run-off which is considered clean water will be connected to existing storm sewer where feasible and allowed to drain directly to the lake while an equivalent (or greater) amount of dirtier surface run-off will be collected, treated and infiltrated in a non-related area of the site. (*Upland Concept*)

Stormwater Measures

- Comply with Total Mass Daily Loading (TMDL) measures by obtaining 80% or greater treatment of Total Suspended Solids (TSS) for all new development.
- Infiltrate, through the use of rain gardens, the increase in run-off volume due to any additional proposed impervious area.
- Maximize treatment efficiency by collecting stormwater run-off from existing and proposed paved areas versus focusing on run-off from rooftops.
- The campus should be pro-active in utilizing students and staff by implementing areas designated for rain gardens prior to them being required due to new construction. i.e. The campus can work ahead on this plan as the rain gardens can be installed independently of other campus improvements.
- Detailed calculations should be analyzed for each rain garden to ensure maximum efficiency and compliance with current stormwater standards.
- In order to meet the minimum stormwater standard required for the proposed campus improvements, the campus will need to add a minimum of approximately 10,000 sf of infiltration area.



Potential Infiltration Area A

This area can be converted into a rain garden, provide the most treatment efficiency in comparison to any other potential area and can be constructed independently of any proposed campus improvement. In order to change drainage patterns, there is a little more infrastructure and design cost involved with this area and should be budgeted and initiated as soon as possible.

Potential area available for treatment = 5,100 SF

Potential Infiltration Area B

This potential area can also be completed independently of any other proposed campus improvement and provides nearly the same magnitude of effectiveness as Area A with less infrastructure improvement costs.

Potential area available for treatment = 4,000 SF

Potential Infiltration Areas C, D1 and D2

These potential areas can also be completed independently of any other proposed campus improvement but do not provide the same magnitude of effectiveness as Area A or B.

Potential area available for treatment = 2,900 SF (combined)

Potential Infiltration Areas E, F, G and H

These potential areas are all very dependent upon proposed campus improvements and would need to be constructed at the same time. Student and campus staff involvement would be limited due to being bound by the construction schedule and not the teaching schedule. They do not offer the same treatment effectiveness due to area available and the ability to treat the dirtiest water that comes from paved areas.

Potential area available for treatment = 7,850 SF (combined)

1/2/2014

Campus Master Plan			
Addition	Description	Proposed Impervious Area	Removed Imp. Area
1	Future Facility & Structured Parking	55,000 sf	48,184
2	DeRecci Hall Expansion	5,500 sf	740
3	Library Expansion	6,700 sf	0
4	Chapel Expansion	5,300 sf	740
5	Regina Hall Western Expansion	4,000 sf	980
6	Dining Expansion	6,000 sf	4,120
7	Regina Hall Eastern Expansion	19,777 sf	9,922
8	Edgedome Expansion	22,500 sf	15,444
9	Sonderregger Expansion	9,100 sf	700
10	Campus School Expansion	26,000 sf	6,000
11	High School Southern Expansion	3,400 sf	1,380
12	High School Eastern Expansion	10,300 sf	3,740
13	Siena Hall Replacement	19,400 sf	4,400
14	New Non-residential Building	14,000 sf	0
15	Marshall Hall Expansion	9,600 sf	10,390
16	New Non-Residential Building	9,300 sf	0
17	Additional Parking (30)	7,900 sf	0
Total Proposed Impervious Area =		233,727 sf	106,740

Proposed Storage req'd by "first 1/2" method =	9,739 cf
Existing amount of site dedicated to SWM =	15,550 sf
Existing stormwater features to be removed =	2,290 sf
Ultimate Total Site Area dedicated to SWM =	22,999 cf
Total Site Area =	2,123,210 sf
Total area for SWM as a % of site =	1.08%



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Professional Seal

Revision: 0000
AREA: 1/2/2014

Project Name:
**EDGEWOOD COLLEGE
STORM WATER
MANAGEMENT
PLAN**

CITY OF
MADISON,
WISCONSIN

Drawn By: MF
Checked By: JL
File: P-SWM
Issued For: FINAL REPORT
Date: 01/02/2014
Project No.: 2486

Sheet Title:
**STORM WATER
TREATMENT
LOCATION MAP**

Scale:
0 100 200
Feet

C1.0

3.12 BICYCLE PARKING PLAN

The Edgewood campus has unique needs for bicycle parking. The campus is small and compact so that students prefer to walk between buildings and do not utilize bicycles to get around on campus. Students for all three institutions come from all over the city and surrounding suburbs, most students do not come from local neighborhoods. For this reason the campus does not see a lot of bike usage as is seen on other local campuses where more students are living nearby. The campus also has a rigorous Transportation Demand Management Plan with a full time director. The students and staff at the college have free bus passes and heavily utilize the Madison Metro system.

The cities current zoning requirements for number of bicycle stalls seem more appropriate for the conditions at the University of Wisconsin and for the Madison Metropolitan School District neighborhood schools. The campus intends to provide the number of stalls that are needed by their students and staff, but does not see the need to provide additional stalls that will not be used.

The Campus recently surveyed existing parking utilization and will update the information periodically for Edgewood College, Edgewood High School and Edgewood Campus School. The 2014 survey indicated that College and High School bike parking facilities are used at about 50% capacity and less in some areas. Campus School utilization is even lower.

Survey of Bicycle Parking

In this section there is a campus map titled Campus Plan – Bicycle Parking Plan that illustrates the quantities and locations for each school. At this time no bicycles are used by Campus School students or staff. The High School has a total of 23 bike parking stalls. The College has a total of 335 stall, 100 of which are covered stalls.

The College has bike parking available near most resident and academic buildings. They track utilization and modify the parking accommodations regularly. The newest residence hall (Dominican Hall) has enclosed and secured parking for 80 bikes and 20 covered stalls will be located in the parking structure on campus.

The need for bicycle parking is a relationship between bicycle usage and the numbers of representative students. Using the recent survey and 2012-2013 enrollment numbers existing utilization rates are shown on the table at the end of this section.

The City of Madison has standards for the campus entities based on numbers of students and classrooms. Long term parking is required for students living on campus. Although one student residence hall (Dominican Hall) has indoor space for bicycles, the College feels that it is adequate for long term bicycle storage to be accommodated in sheltered structures with standard racks.

Future Bicycle Parking Facilities

The following table shows existing bike parking available, utilization rates and proposed parking ratios to be used for future development. The future ratios are similar to the current ratios since this ratio is working well for number of bicycle stalls provided and utilized. New bike stall locations will be added to each new project for the convenience of the staff and students. Bike stalls on the college campus will increase with the number of new residents on campus as well as the number of enrolled students. Potential future bike stall locations are shown on the campus plan in this section.

The Campus will continue to monitor bicycle parking utilization and update bike parking facilities on a regular basis. Surveys should be taken three times each year (fall, winter and spring) to record location, number of bike parking stalls available, and the number used. Student and staff input will be considered as part of a regular procedure for planning changes to bicycle parking facilities. As part of the review process by the Architectural Design Review Committee for building and site modifications on campus, the campus bicycle parking staff should present the most recent survey results, plans for the future bike parking facilities and plans relating to the project being reviewed by the Committee.

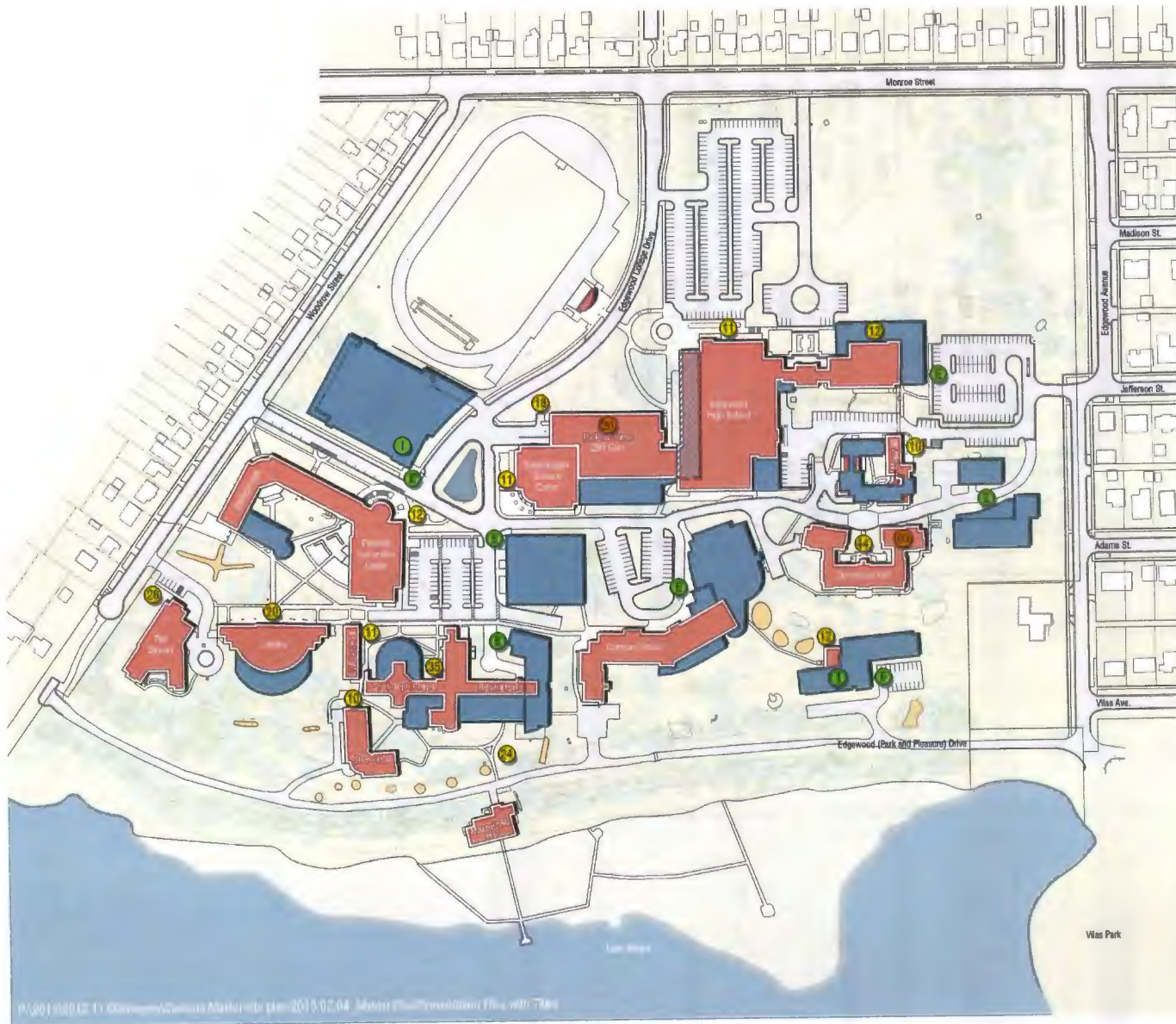
Standards for quantities and location of parking facilities should be based on the increase in the number of full time students enrolled at the Monroe Street campus and the number of students residing on campus.

New bike racks will comply with current city code standards and existing non-compliant bike racks will get replaced with contemporary racks as nearby projects are put forward.

Quantities of bicycle parking shall be based on the ratios in the following table (see next page):

Existing Bicycle Parking Facilities and Utilization Ratios					Standards for Quantities of Bicycle Parking for future developments
School and Bicycle Parking Categories	Student Population 2012*	Existing No. of Bike Parking Stalls	Ratio of Stalls Available per No. of Students	Ratio of Stalls Used per No. of Students based on survey of use 2014	Ratio of Stalls to be provided per no. of Students
Edgewood Campus School					
Students, Short Term Parking	275	0	0	0	1 stall per 25 students (provided when new addition is built)
Edgewood High School					
Students, Short Term Parking	593	23	1 stall per 25 students	1 stall per 50 students (12 stalls used)	1 stall per 25 students
Edgewood College					
Fulltime Commuter Students Enrolled at the Monroe Campus, Short Term Parking	1699	113	1 stall per 15 students	1 stall per 30 students (56 used)	1 stall per 15 students
On-Campus Student Residents, Short Term Parking Outdoor Racks	553	122	1 stall per 4.5 student residents	1 stall per 9 student residents (61 used)	1 stall per 5 student residents (to be added when additional residents are added to campus)
On-Campus Student Residents, Long Term Parking Indoor Racks	553	80	1 stall per 6.9 on-campus students	1 stall per 7.5 on-campus students (based on Dominican Hall)	1 stall per 7 student residents (to be added when additional residents are added to campus)

* 2012 Student enrollment at Edgewood College was 2,252, with 553 residents and 1699 non-residents/commuters



Existing Bike Parking

College
Surface Stalls: 235
Covered Stalls: 100
335

High School
Surface Stalls: 23
Covered Stalls: 0
23

Campus School
Surface Stalls: 0
Covered Stalls: 0
0

- Existing Buildings
- 2010 Campus Plan Proposed Additions/Expansions
- Native American Mound
- Existing External Bicycle Parking
- Existing Internal Bicycle Parking
- Future External Bicycle Parking
- Future Internal Bicycle Parking



Campus Plan - Bicycle Parking Plan
Edgewood Campus Plan
September 18, 2014

4

NEIGHBORHOOD AND CITY PROCESS

- 4.1 Introduction
- 4.2 Memorandum of Understanding
- 4.3 Affirming Past Agreements
- 4.4 New Agreements – Master Plan 2014
- 4.5 Process for Approvals

4.1 INTRODUCTION

As part of its continued orderly expansion and improvement of the Edgewood Campus, Edgewood College is proposing a formal update to its Campus Master Plan from 1997.

The Edgewood Neighborhood Liaison Committee, with the support and approval of the Councils of the Dudgeon-Monroe and Vilas Neighborhood Associations and Edgewood, Incorporated, submit this memorandum. It is intended to provide a record of issues identified and consensus reached throughout consultations regarding the updated Campus Master Plan. It is our hope that this will be helpful to the three Edgewood Schools and to the City of Madison during the approval process, and beyond.

The work of this committee was supplemented by two open public meetings, presentations to both neighborhood associations, plus numerous sub-committee meetings sponsored by the Liaison Committee. Edgewood's Vice President for Student Development/Dean of Students, Maggie Balistreri-Clarke, managed leadership of the committee and the process of interaction among the Edgewood Schools, Potter Lawson, Inc. and other planners including expert consultants, Edgewood faculty and staff, and the neighborhoods.

The residents of the city of Madison place high value on the established residential character of Dudgeon-Monroe and Vilas neighborhoods, and additionally place a very high value on the woods and other undeveloped areas that help characterize this unique area of the city. Edgewood shares these values. With our mutual vision of protection for our shared neighborhood and its natural resources, and in a spirit of collaboration, we proceeded to voice concerns, address issues and seek agreement.

The following document is the product of our work as the Edgewood Neighborhood Liaison Committee. Section two of this document is an annotated version of the original "Memorandum of Understanding of Unresolved Issues" from April 1997 with 2013 updates. This section outlines issues and concerns raised during the 1997 Master Planning process along with the subsequent agreements reached through the collaborative efforts of the Edgewood Neighborhood Liaison Committee. Section Three identifies past agreements to be reaffirmed and updated as a part of the 2013 Master Plan. Section Four includes new agreements that were created in response to the issues and concerns raised as part of the 2013 Campus Master Plan approval process. Agreements specifically for Site One, the residence halls and for the east end of campus can be found in Section 3.4 and 3.5 respectively. A document submitted by the two neighborhoods Associations can be found in Appendix A.4.



4.2 MEMORANDUM OF UNDERSTANDING

Memorandum of understanding of unresolved issues between Edgewood Inc., Edgewood college, Edgewood high school, the Edgewood campus school and the Dudgeon-Monroe and Vilas neighborhood associations

Whereas the three institutional entities comprising Edgewood Inc. (Edgewood College, Edgewood High school and Edgewood Campus School) and the two neighborhood associations whose boundaries border the Edgewood campus (Vilas Neighborhood Association and Dudgeon-Monroe Neighborhood Association, Inc.) agreed to send representatives to convene as the Edgewood Neighborhood Working Group during the Summer of 1996, following the Madison Plan Commission's denial on March 18, 1996 of Edgewood's Conditional Use Permit application, and

Whereas the goal of this Working Group was to explore whether consensus existed among the Edgewood entities and the neighborhoods on the specific contents of a Conditional Use Permit application which could be submitted by Edgewood prior to March 18, 1997 (the prescribed waiting period after denial of a Conditional Use Permit application), and

Whereas discussions which occurred during Working Group meetings were pursued in good faith by all participants and were very detailed, and Whereas important issues and essential understandings which were discussed are documented in Working Group minutes, but cannot easily be retrieved, and

Whereas these issues and understandings are critical to future good relations between the Edgewood institutions and surrounding neighborhoods,

Now therefore all persons signing this Memorandum of Understanding acknowledge familiarity with the issues and concerns detailed below and agree to fairly and openly communicate these issues and concerns to the constituencies these signing parties represent and when presenting information at public gatherings and to governmental bodies. The three Edgewood educational institutions and the two neighborhood associations whose boundaries border the Edgewood Campus shall acknowledge at all times those issues on which consensus does not exist and shall continue to seek solutions to unresolved controversies in a forthright and open manner.

1. Internal Campus Traffic Corridor

Meetings of the Working Group did not produce consensus on the desirability of an internal roadway which would completely connect all three Edgewood entities to the central, Monroe Street entrance. Many neighborhood residents believe that such a roadway, circling throughout the campus, is the best long-term solution to campus access and traffic circulation challenges. These challenges include the current problem of excessive automobile traffic on Edgewood (Park & Pleasure) Drive and the possibility that the Campus School drop-off at the Edgedome may not result in a desired decrease in use of Edgewood (Park & Pleasure) Drive.

As a result of the Working Group's discussions, the Edgewood entities have agreed to construct a roadway serving a new 38-car parking lot and drop-off/pickup circle located north of the campus school. This roadway will be built south of the Science Facility and north of the Edgedome. While Edgewood has agreed to build this roadway and relocate the Campus School parking lot, there is strong opposition to extending the roadway past the western edge of the high school gymnasium. To preserve the safety of the children moving between the Campus School, the High School and the new Science Facility, Edgewood believes that a walking route free of roadway crossings is needed.

The drop off plan developed in 1996 has resulted in greatly decreased traffic on Edgewood (Park & Pleasure) Drive.

2. Edgewood (Park & Pleasure) Drive Use

Edgewood (Park & Pleasure) Drive is a unique treasure, having been designated specifically for Edgewood (Park & Pleasure) Drive purposes in a 1904 agreement between St. Clara College (Edgewood) and the Madison Park and Pleasure Drive Association. While strongly supportive of the purposes of the 1904 easement to provide for a Park and Pleasure drive, Edgewood reaffirms that, as the 1904 agreement also provided that the owners of the property would have several forms of access to ensure the continuing use of their adjacent land, that right remains critical to support their educational mission – the purpose of the original grant of land to the Sinsinawa Dominicans.

There exists strong opposition by many neighbors and others throughout the city to the number of motorized vehicles currently traveling on Edgewood (Park & Pleasure) Drive for purposes other than those intended in the original agreement. Continuing efforts will be made by individuals, elected officials and other groups to reduce traffic permissible on and attracted to Edgewood (Park & Pleasure) Drive.

These efforts may be in direct opposition to continuing use of the Drive as an access point to the Campus School and other Edgewood facilities. The redesign of the Campus School parking lot to the south of the school as basketball courts and a 20-car overflow parking lot with a gated entrance on Edgewood (Park & Pleasure) Drive is included in the initial application for a Conditional Use Permit. As stated in the approved Master Plan, Edgewood is strongly supportive of efforts to reduce traffic volume on the Drive and is interested in participating in discussions with the neighborhood associations and City Traffic Engineering on alternative traffic patterns on Edgewood (Park & Pleasure) Drive, while maintaining their right to access to their property.

The Edgewood Neighborhood Liaison Committee worked together to advocate for the closing of Edgewood (Park & Pleasure) Drive to through traffic. The City of Madison developed a plan to eliminate through traffic on the Drive. The plan was implemented in 2006.

3. Parking Supply and Science Facility Ramp Expansion

Meetings of the Working Group did not produce consensus on ultimate location of all of the proposed 975 parking spaces. Neighbors recognize Edgewood's need to project where the spaces might be. However, consensus to proceed with a Phase 1 Conditional Use Permit application shall not be construed to indicate concurrence with all proposed sites for future parking.



Meetings of the Working Group did not produce consensus on the desirability of designing and building the Science Facility parking ramp so that vertical expansion, if needed in the future, is possible. Neighborhood representatives believe vertical expansion may be needed if parking spaces proposed by Edgewood in its Master Plan are not authorized in future Conditional Use Permits, and if Edgewood's projections about future parking needs are ultimately found to have underestimated actual needs.

In response, Edgewood representatives support the intent of the Master Plan to place as much of the Science Facility parking as possible underground.

Any further vertical expansion of the parking ramp would have negative visual impact on the nearby high school building and the proposed entry drive, as well as the views of the campus from Monroe Street and the Campus School. In addition, the Science Facility would lose east facing windows and the slopes of the parking ramps would exceed recommended maximum grades. As a consequence, Edgewood concludes that an additional Phase 1 expenditure on structural capacity to support vertical expansion would not be a wise investment. All parties acknowledge that retrofitting for vertical expansion at some time in the future will be more expensive than initially building for possible vertical expansion.

Since 1996, each conditional use permit application has included an updated parking plan. A Parking and Transportation Management Plan will be included in the 2013 Master Plan. The SAA Parking and Transportation Study references an additional 68 stalls to the capability of existing parking deck.

4. Future Fine Arts Facility

Meetings of the Working Group did not produce consensus on the building setback of the future Fine Arts Building. Many neighborhood residents believe that a setback of 100 feet for the entire Woodrow Street face of the building is needed for the proposed building. All parties to the discussion acknowledge that with a 100 foot setback the building may accommodate fewer parking spaces, but there is not consensus on the number of parking spaces which may have to be sacrificed to obtain a 100 foot setback. Edgewood believes that a setback of 50 feet, similar to DeRicci Hall, would be appropriate along Woodrow Street, if the future Fine Arts Facility is designed to provide a transition in building scale from institutional to residential. During the Edgewood/ Neighborhood Working Group meetings, a plan was prepared showing a minimum setback of 75 feet at the northwest corner and 95 feet at the southwest corner of the future Fine Arts facility. The 203 parking spaces proposed in the Fine Arts Facility in this plan represent approximately two thirds of the total number of spaces permitted in this location in the approved Master Plan.

Neighborhood representatives would like to ensure that the entrance to the future Fine Arts parking ramp is located no less than 175 feet from the Woodrow curb line. Edgewood believes that the difference in elevation between the lower level of the parking ramp

and the drive in front of DeRicci needs to be considered in determining the location of the ramp entrance. This entrance will be no closer than 120 feet from the Woodrow curb line.

Edgewood representatives state that funding for this future building is not available and that it has not been designed. Edgewood will communicate fully and openly with neighborhood residents at all phases as design of the Fine Arts building is undertaken by Edgewood.

The setback for the Visual and Theatre Arts Center is 70 feet from the curb of Woodrow St. This setback was determined after full discussions with neighborhood residents. In this Master Plan update, Edgewood is depicting future setbacks a minimum of 70 feet from the curbs of both Woodrow Street and Edgewood Avenue. Setbacks for the 2013 Master Plan will be addressed in Chapter 3 of the Master Plan.

Please note that in 1997 this space was seen as a possible site for a fine arts facility. In the 2013 Master Plan other uses will be listed as under consideration.

5. Campus Periphery

Neighborhood representatives have stated their intent to seek building setbacks for all future classroom buildings of 100 feet from the edge of streets adjacent to the campus and at least 200 feet from the edge of adjacent streets for all future residence halls. More than 200 feet will be requested in the case of a proposed dormitory in the southeast corner of the Edgewood property. Neighborhood representatives will request a setback of at least 50 feet from the street edge for all surface parking lots. In addition, Edgewood is requested to develop a set of architectural guidelines which it will follow as it proposes future development, including building height, angle of height increase, and construction material to be used.



While Edgewood representatives believe that transitions in building height and scale from neighborhood edges are important, a minimum building setback of 100 to 200 feet is not believed to be the best approach for addressing neighborhood concerns and meeting Edgewood's needs. A combination of moderate at-grade setbacks (e.g., 50 feet), landscaping, and a building height limitation at the setback line with an agreed angle of height increase beyond the at-grade setback are preferred.

Setbacks

A minimum setback of 70 feet is planned for any future facilities built along Woodrow Street and Edgewood Avenue. The architectural guidelines for the 2013 Master Plan will include height, massing, setbacks and materials to be used for building on the perimeter of campus. The SW corner of the building at Site #1 will have a setback of 91'.

6. Continuing Relations Between Edgewood and Surrounding Neighborhoods

Of continuing concern to Neighborhood residents is Edgewood's failure to clarify its intentions regarding the acquisition of property beyond the campus boundaries as those boundaries are shown in the Master Plan. In the discussions on property acquisitions outside the boundaries shown in the Master Plan the Edgewood representatives stated clearly that there are no plans at present to acquire additional property in the immediate neighborhood, but considered that Edgewood's and neighborhood property owner's right to buy or sell property should not be restricted. Neighborhood residents intend to pursue this issue in future discussions with Edgewood representatives.

The Edgewood entities and the Neighborhood Associations represented in the Working Group agree to continue to build upon the communications and understandings which have resulted from the Working Group meetings. One vehicle for communication shall be the proposed Edgewood/Neighborhood Liaison Committee. However, the task of fostering goodwill and understanding cannot be left to designated representatives. It is a task to be shared by all persons associated with Edgewood and all residents of the surrounding neighborhoods. Early, meaningful involvement of neighbors in Edgewood's development plans and Edgewood's involvement in ongoing programming and planning in the neighborhoods will be essential if trust and cooperation are to flourish between the Edgewood entities and their neighbors.

The 'Working Group' that drafted this memo proposed that an Edgewood Neighborhood Liaison Committee be created to serve as a coordination and communication vehicle for the 3 Edgewood Schools and the 2 Neighborhood Associations. Since its creation in 1997, this group has met regularly to discuss and address concerns. Early involvement in development plans and ongoing programming and planning as described in this document has occurred throughout the past 15 years. An updated document affirming the roles and responsibilities of the Edgewood Neighborhood Liaison Committee is included in the following section of this chapter.

The issue of property acquisition in the neighborhood remains a concern for neighbors.

In conclusion, despite the fact that consensus on all issues has not been reached during the period of time the Edgewood/Neighborhood Working Group has met, the Dudgeon-Monroe and the Vilas Neighborhood Associations agree to support the April 1997 Conditional Use Application provided that all aspects of the application are consistent with the understandings and agreements reached in the 1996-1997 discussions of Edgewood/Neighborhood Working Group as documented in the Conditional Use Plan Notes and Operational Agreements which are contained in the Transportation and Parking Management Plan dated April 16, 1997, provided Edgewood complies with all other conditions of approval of the Master Plan which relate to submission of the first conditional use application, and provide further discussion of issues enumerated in this Memorandum of Understanding is not precluded.

4.3 AFFIRMING PAST AGREEMENTS

This section identifies agreements made between 1997 - 2013 to be reaffirmed and updated as a part of the 2013 Master Plan.

1. Edgewood Neighborhood Liaison Committee – 1997 Campus Master Plan agreement

The three Edgewood Schools reaffirm their commitment to the Edgewood Neighborhood Liaison Committee as a primary vehicle for ensuring strong partnership and communication. The Committee representatives of the three Edgewood schools worked with the neighborhood representatives to update the 1997 Neighborhood Liaison Committee formation document. The following updated agreement was approved by the Edgewood Neighborhood Liaison Committee on November 19, 2013.

EDGEWOOD / NEIGHBORHOOD LIAISON COMMITTEE

Approved November 19, 2013

Goal: The goal of the Edgewood/Neighborhood Liaison Committee is to facilitate cooperative working relationships between the Edgewood Schools and their surrounding neighborhoods.

Membership: The Committee will include a representative from each of the three Edgewood Schools and representatives from the Vilas and Dudgeon/Monroe Neighborhood Associations. Each Neighborhood Association may appoint up to three members. The three Edgewood Schools and the Neighborhood Associations are responsible for appointing members who will work in a cooperative manner in a spirit of community.

Meetings: The Committee should be scheduled to meet at least quarterly. The scheduled meetings will be called by the Edgewood representatives. During times when a building project is being developed or an issue of mutual concern has arisen, the Committee should meet more frequently. Unscheduled meetings may be called by either the representatives of the Neighborhood Associations or the Edgewood Schools.

Responsibilities:

1. Receive communication from neighbors and provide a forum to receive Neighborhood Association concerns.
2. Inform neighborhoods of scheduled events, specifically those which may require the use of access and exits during restricted periods.
3. Act as a clearinghouse for concerns which may be referred to appropriate decision making bodies.

4. Inform their respective constituencies of on-going programs and planning on the Edgewood campus and in the neighborhoods of mutual interest.

The Edgewood/Neighborhood Liaison Committee is not a policy or decision making body.

2. Housing in the neighborhood – Affirm 2006 Dominican Hall Agreement

- The College will not use houses in the neighborhood to house traditional undergraduate students.
- Edgewood is willing to agree not to turn currently-owned properties into student housing.
- Edgewood will implement a policy that makes it clear that they do not endorse students illegally occupying houses. Edgewood will work actively to inform parents and students of this policy.
- Edgewood shall maintain the two properties presently owned on Woodrow Street in a manner consistent with requirements imposed by the City of Madison.

3. Gate Closures and Campus Entryways

Edgewood Avenue Gate –Dominican Hall – Updated 2007 agreement

- When the Marshall parking lot was expanded, Edgewood constructed a gate and a fence to prohibit pedestrian and vehicular entry to the Edgewood campus from all access points from Edgewood Avenue between the hours of 11:00 pm and 5:00 am, 7 days a week. This concession by Edgewood was designed to directly address concerns raised by the neighborhood representatives concerning late night traffic entering the campus via Edgewood Avenue. The exiting mechanism will continue to be configured to allow only designated users to exit.

Center Drive/ Edgewood College Drive– Updated 1997 Campus Master Plan agreement Edgewood affirms its agreement that the Center Drive, now called Edgewood College Drive, will serve as the principal access roadway to the Edgewood Campus, whenever possible, for all vehicular traffic, including school buses, service and delivery vehicles, trucks and construction related traffic. Edgewood, Inc. will maintain a signage plan to promote the use of this access.

Edgewood College Drive and the secondary access road on Woodrow Street will continue to be named as private streets. The address assignment to each building on the campus and the signage plan will continue to be coordinated to promote, to the maximum extent possible, vehicular use of the Edgewood College Drive. In addition, the Edgewood Schools will continue to enhance and promote the access from Edgewood College Drive to the surface parking lot near Woodrow Street, Site #1 on the Campus Master Plan

Woodrow Street Entry – Updated 1997 Campus Master Plan Agreement

The Woodrow Street entry will continue to be closed (by posting) for the entire day during vacations, summers, holidays and weekends, and between 6 pm and 6 am on regular school days except in emergencies and for concurrent activities when large numbers of vehicles exit all at once. If needed, the Woodrow Street entrance will be open for larger activities or concurrent activities that will be attended by non-campus resident audiences including graduations, concerts, tournaments, open houses, fundraising events, conferences, workshops and religious services. The duration for use of the Woodrow access during special events is intended to be the minimum necessary to deal with short periods of congestion when many vehicles are leaving at the same time at the conclusion of a special event.

The Edgewood members of the Liaison Committee will continue to inform the neighbors of the times when an event will require an opening of the Woodrow Street entrance and the Liaison Committee will have the responsibility of overseeing the operation of the agreement.

Edgewood Campus will continue to provide signage at the secondary Woodrow Street entry and notify all students, faculty and staff of use restrictions. Notifications to students, faculty and staff will include a reminder of the posted speed on residential streets and urge drivers to respect the need for safety in residential areas.

4. The Stream - Updated Agreements 2010 and 2012

Lighting of the West Side of the Building

Motorized perforated fabric shades will be maintained on the west side of the building within the studio spaces to cut down on nighttime spillage of internal light. The shade fabric will have 1% transparency. The blinds will continue to be on a timer to automatically lower in the evenings.

Interior Lighting

Occupancy sensors are used in classrooms and offices. There is no direct glare from fixtures on the south side of building facing the Edgewood (Park & Pleasure) Drive

Access via Edgewood College Drive to The Stream

Edgewood will actively work to minimize the impact of any Woodrow Street traffic associated with public performances. Voicemails and email responses to ticket requests for productions at the Black Box Theatre will continue to direct people to park on campus via the central drive. If outside groups want to book the facility, they need to publicize access as coming off of the central drive. Security will continue to arrange a golf cart shuttle from the central parking lot for anyone needing assistance to get to the Black Box Theatre on performance nights.

Parking lot at The Stream

Parking is for handicapped and faculty/staff who are carpooling. This is enforced 24/7.

Parking lot lighting at The Stream

No acorn-type lighting is used. Lights on poles have cut-off housings, and bollards have shields on the west sides to prevent glare into neighborhood.

Alcohol at The Stream

Alcohol, if served, will be in conjunction with events so that the building is not a destination for drinking alcohol.

Amplified Music on the Outdoor Patio at The Stream

There will be no amplified music on the outdoor patio at The Stream.

5. Outdoor Events on Campus

The Liaison Committee is notified in advance of dates, times, and locations of outdoor music events along with name of contact person during event. This is also true when outside groups rent space.

6. Non-Exclusive Easement to City of Madison for Public Use of Edgewood (Park & Pleasure) Drive

The non-exclusive rights granted to the public to use Edgewood (Park & Pleasure) Drive pursuant to the terms and conditions set forth in that certain Easement and Amended Agreement between Edgewood, Incorporated and the City of Madison, executed May 22, 1997 and recorded in the Dane County Register of Deeds as

Document No. 2855990 on May 23, 1997, as amended by that certain Amendment dated December 26, 2008 will continue and are hereby incorporated into this Master Plan upon the terms and conditions set forth therein (copies of the 1997 Easement and Amended Agreement and the 2008 Amendment are attached to the Master Plan as Appendix A.7). The Edgewood Schools and their students, guests and invitees will also continue to have the right to use and enjoy Edgewood (Park & Pleasure) Drive.

See Appendix A.7 for Edgewood (Park & Pleasure) Drive Easement Agreements.



Historic Photo of Park and Pleasure Drive

4.4 NEW AGREEMENTS – MASTER PLAN 2013

This section identifies new issues and agreements reached through a collaborative process led by the Edgewood Neighborhood Liaison Committee. Please see Section 3.0 for specific agreements on site one and for the residence halls and east end of campus.

1. Enrollment

The Edgewood Neighborhood Liaison Committee accepts the new proposed maximum enrollments for the three Edgewood schools: 325 for Edgewood Campus School; 725 for Edgewood High School and 2,660 for Edgewood College.

2. Traffic and Access

The Edgewood Neighborhood Liaison Committee accepted the 2013 Parking and Transportation Study as presented by SAA at the May 22 Open Meeting with updates to include a plan for campus-wide coordination of traffic and parking and the High School Parking and Transportation Plan. These updates have now been created; please see Chapter 3 for Transportation Plan, Transportation Addendum and the Edgewood High School Transportation Plan.

There is no parking permitted or anticipated increase in vehicular traffic on the Edgewood (Park & Pleasure) Drive.

Traffic and parking update will be done when there is a planned population change or program change that is going to affect facility usage.

Edgewood College will work with the City and the Liaison Committee to do all that they can to disallow resident students from obtaining permits for on-street parking.

As a part of the Site One planning and approval process, Edgewood will revisit and reconsider with the liaison committee the potential for increasing the hours of closure for the Woodrow Street entry. In 1997, when these hours of closure were determined, it was feared that Monroe Street would be so backed up that motorists would choose to divert to West Lawn via Leonard Street to avoid the congestion. However, the Monroe Street traffic count has since dropped significantly by 5-6,000 cars per day, and there is now a cul-de-sac at Leonard. Therefore, the potential for more weekday hours of closure for the Woodrow Street entry will be explored.

3. Phasing Plan

At the time of the development of this Master Plan, Edgewood College is in the process of preparing for a proposed eastern expansion of Regina Hall at Site #7. The phasing for all other projects for any of the 3 Edgewood Schools cannot be determined as no other building priorities are under consideration at this time.

Mitigation efforts for any construction that affects the Edgewood (Park and Pleasure) Drive should be addressed through the Architectural Design Review process.

4. Pole lights at east and west end of campus

Neighbors have requested that the pole lights on both the east and west end of campus be turned off at 11:00 pm. Edgewood will take reasonable steps to accommodate this request. However, because lighting plays a critical role in securing the safety of campus, Edgewood will not agree to limit its ability to use lighting as a safety measure but will agree to discuss the timing of lighting with the Liaison Committee.

4.5 PROCESS FOR APPROVALS

Architectural Design Review Committee (ADRC)

**Approved by: Edgewood Neighborhood Liaison Committee
November 19, 2013**

Purpose of the Architectural Design Review Committee

The ADRC is established to review the architectural and site design of each proposed new building on the Edgewood Campus as shown in the Campus Master Plan. The Committee will review the proposed projects to determine if the architectural design and site design follows the intent and guidelines of the approved campus master plan. The Committee will review the projects with emphasis on:

- The quality of the architectural form, exterior appearance, external common space and landscape design.
- The relationship of the building design with the campus as a whole, including pedestrian and vehicular circulation patterns, connections to open spaces and natural areas.

ADRC Membership

- 1 Campus School representative – chief executive or designee
- 1 High School representative – chief executive or designee
- 1 College representative – chief executive or designee
- 1 Dudgeon Monroe Neighborhood Association representative
- 1 Vilas Neighborhood Association representative

The positions of Neighborhood Representatives will be nominated by their respective associations and will be vetted by a panel consisting of the District #13 Alder, a representative of the Edgewood Schools and the two Neighborhood Association Presidents. Up to three candidates will be vetted for each of the two positions.

- 1 City Staff representative appointed by the City of Madison
Planning Division Director
- 1 Outside Architect – Identified by Edgewood Schools
- 1 Outside Landscape or Planning Resource – Identified by
Edgewood Schools

The Committee will be chaired by the school rep whose building is being proposed. The ADRC will focus on consensus-style decision-making

Project Review Process

1. Review design with the three Edgewood Schools.
2. Review the design with the City of Madison Development Assistance Team (DAT).
3. Review the design with the Edgewood Neighborhood Liaison Committee.
4. Submit the design to the Edgewood Campus Architectural Design Review Committee (ADRC) for preliminary review.
5. ADRC will host an informational meeting with notice sent to the District #13 Alder, neighborhood associations and property owners and occupants living within 300 feet of the centerline of the campus perimeter streets.
6. ADRC conducts final reviews and submits the project to the City of Madison Zoning Department for site plan approval prior to issuance of building permits.

A

APPENDIX

- A.1 Enlarged Campus Site Plans
- A.2 Transportation Master Plan
- A.3 Stormwater Management Report
- A.4 Neighborhood Perspective on the
Liaison Team Process
- A.5 City Plan Commission Approval Letter
- A.6 Parks Department – Parks Impact Fee Letter
- A.7 Edgewood (Park and Pleasure) Drive Easement
Agreements

A.1

CAMPUS SITE PLANS

Campus Plan – Existing Buildings
Existing Conditions – Boundaries
Survey of Indian Mounds
Madison Water Main and Interceptor Survey
Campus Plan – Future Buildings
Perimeter Building Setback Diagram
Open Spaces Diagram
Campus Plan – Bicycle Parking Plan
Stormwater Management Plan

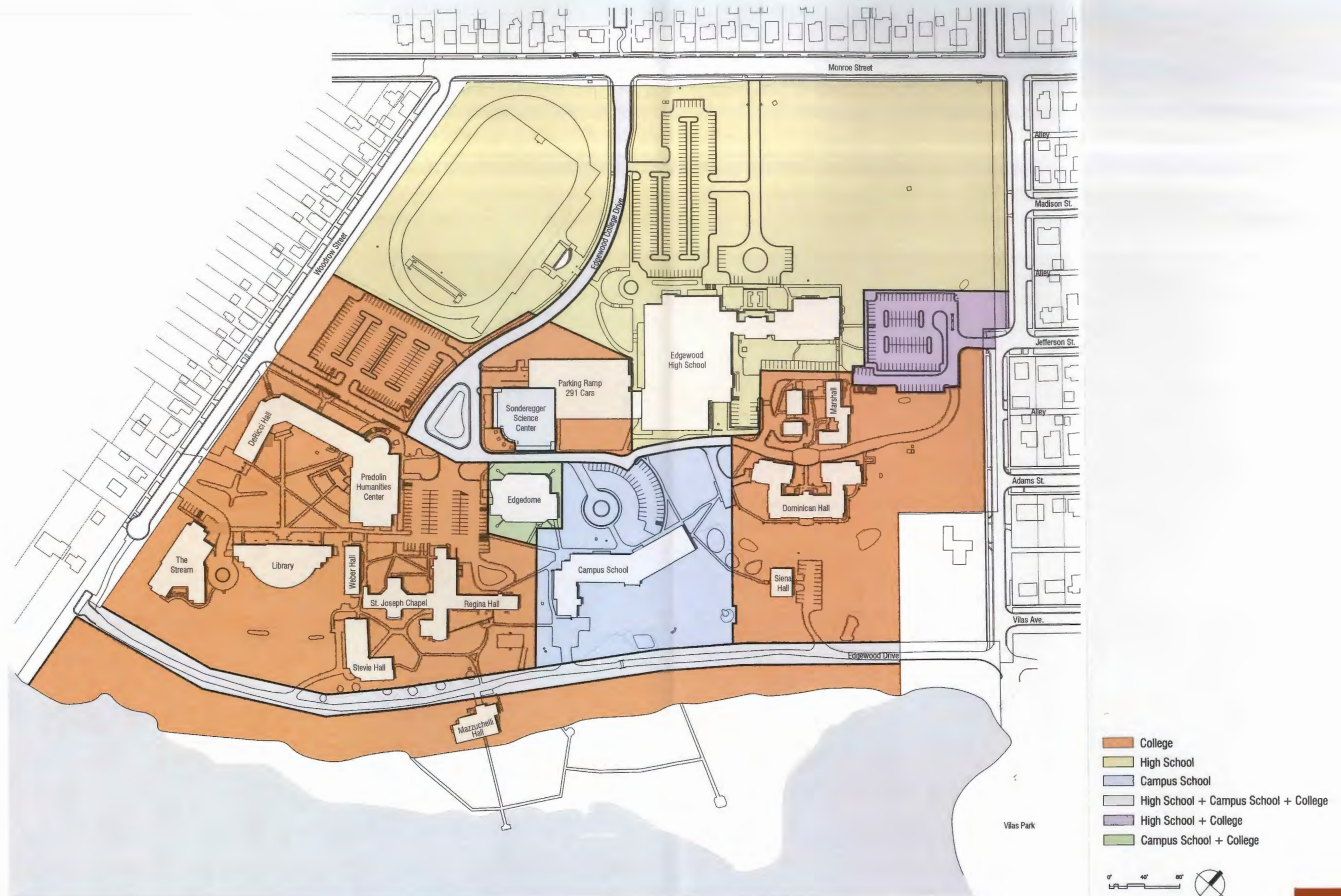


- Existing Buildings
- Native American Mound

Campus Plan - Existing Buildings

Edgewood Campus Plan

January 08, 2014



Existing Conditions - Boundaries

Edgewood Campus Plan

January 08, 2014

LEGEND



BUILDINGS

- ⑥ MARIE STEPHEN REGES HALL
- ⑦ MAZZUCHELLI BIOLOGICAL STATION
- ⑧ REGINA HALL
- ⑨ ST. JOSEPH CHAPEL
- ⑩ TODD WEHR EDGEDOME

- ⑪ **SONDEREGGER SCIENCE CENTER**
- ⑫ **SIENA HEIGHTS APARTMENTS -
SITE OF FUTURE RESIDENCE HALL**
- ⑬ **EDGEWOOD COLLEGE NURSERY SCHOOL**
- ⑭ **MARSHALL HALL**

- 15 **EDGEWOOD HIGH SCHOOL**
16 **EDGEWOOD GRADE SCHOOL**
17 **DOMINICAN HALL**



PREPARED FOR:
EDGEMOOD, INCORPORATED
1000 EDGEMOOD COLLEGE
MADISON, WI 53711

EXHIBIT

CANTON

PART OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER (SW 1/4 - SW 1/4) OF SECTION TWENTY-TWO (22), PART OF THE FRACTIONAL NORTHWEST QUARTER OF SECTION TWENTY-SEVEN (27) AND A PART OF GOVERNMENT LOT ONE (1) (BEING THE FRACTIONAL EAST HALF OF THE NORTHEAST QUARTER (E 1/2 NE 1/4) OF SECTION TWENTY-EIGHT (28), ALL IN TOWN SEVEN (7) NORTH, RANGE NINE (9) EAST, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN

JSD Professional Services, Inc.
• Engineers • Surveyors • Planners

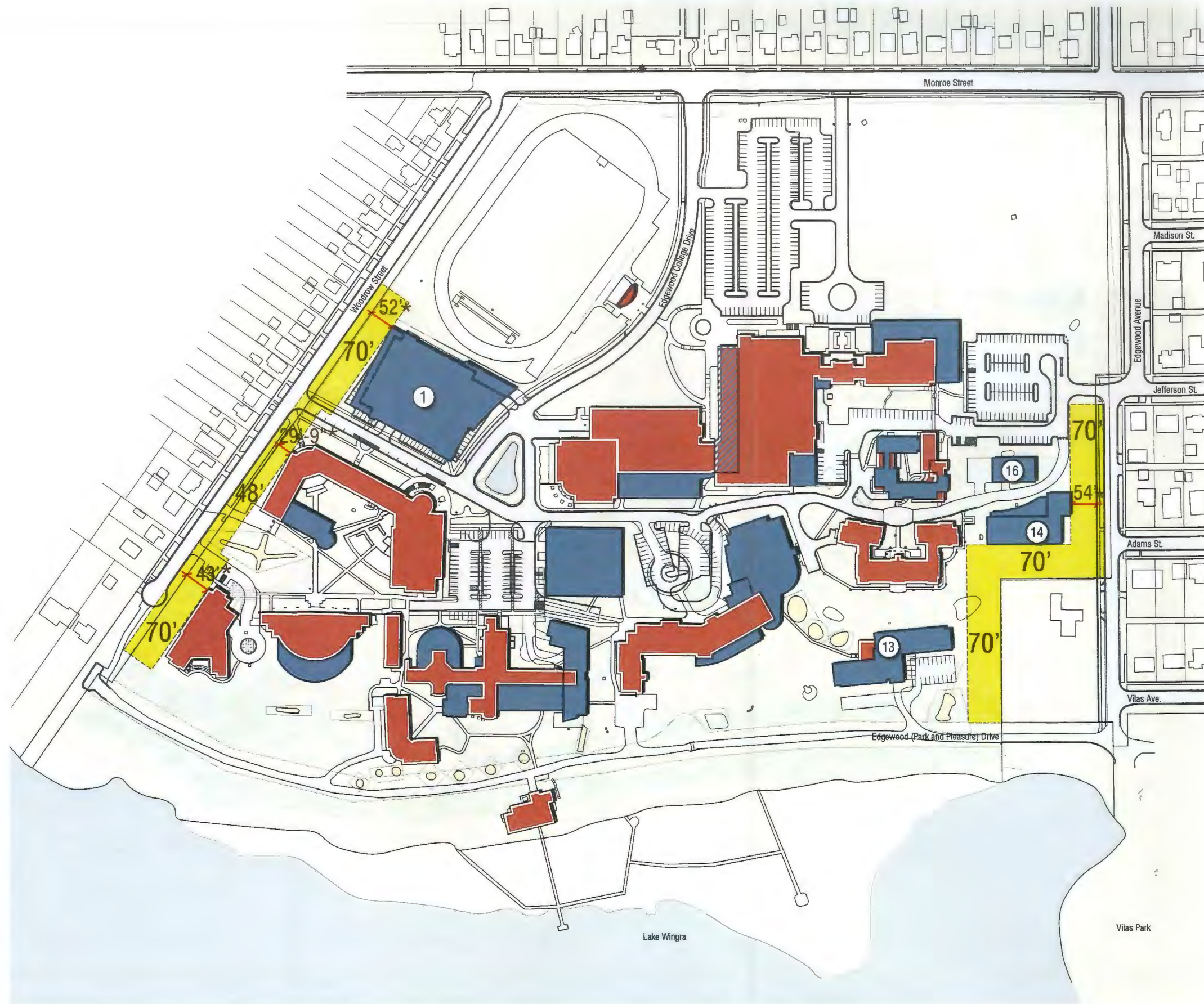
PROJECT NO. 12-002
 E No. 2-161
 SURVEYED 12
 NO/PB: 12/14
 SHEET NO. 100

Potential New Buildings or Additions

1. Future Facility & Structured Parking
2. DeRicci Hall Addition
3. Library Addition
4. Chapel Addition
5. Regina Western Addition
6. Dining Hall Addition
7. Regina Hall Eastern Addition
8. Edgedome Renovation or New Facility
9. Sonderegger Addition
- 9a. Addition to Parking Structure
10. Campus School Addition
11. High School Southern Addition
- 11a. High School Expansion over Existing Common Space
- 11b. High School Core Addition
12. High School Eastern Addition
13. New Residential or Mixed Use to Replace Siena Hall
14. New Non-Residential Building
15. Marshall Hall Addition
16. New Non-Residential Building
17. Additional Parking
18. Revised Parking Layout
19. Revised Parking Layout
20. Existing Curb Cut
21. See Note 21 on Campus Plan Narrative
22. New Entrance to Regina Hall

- Existing Buildings
- 2010 Campus Plan Proposed Additions/Expansions
- Native American Mound





Perimeter Buildings

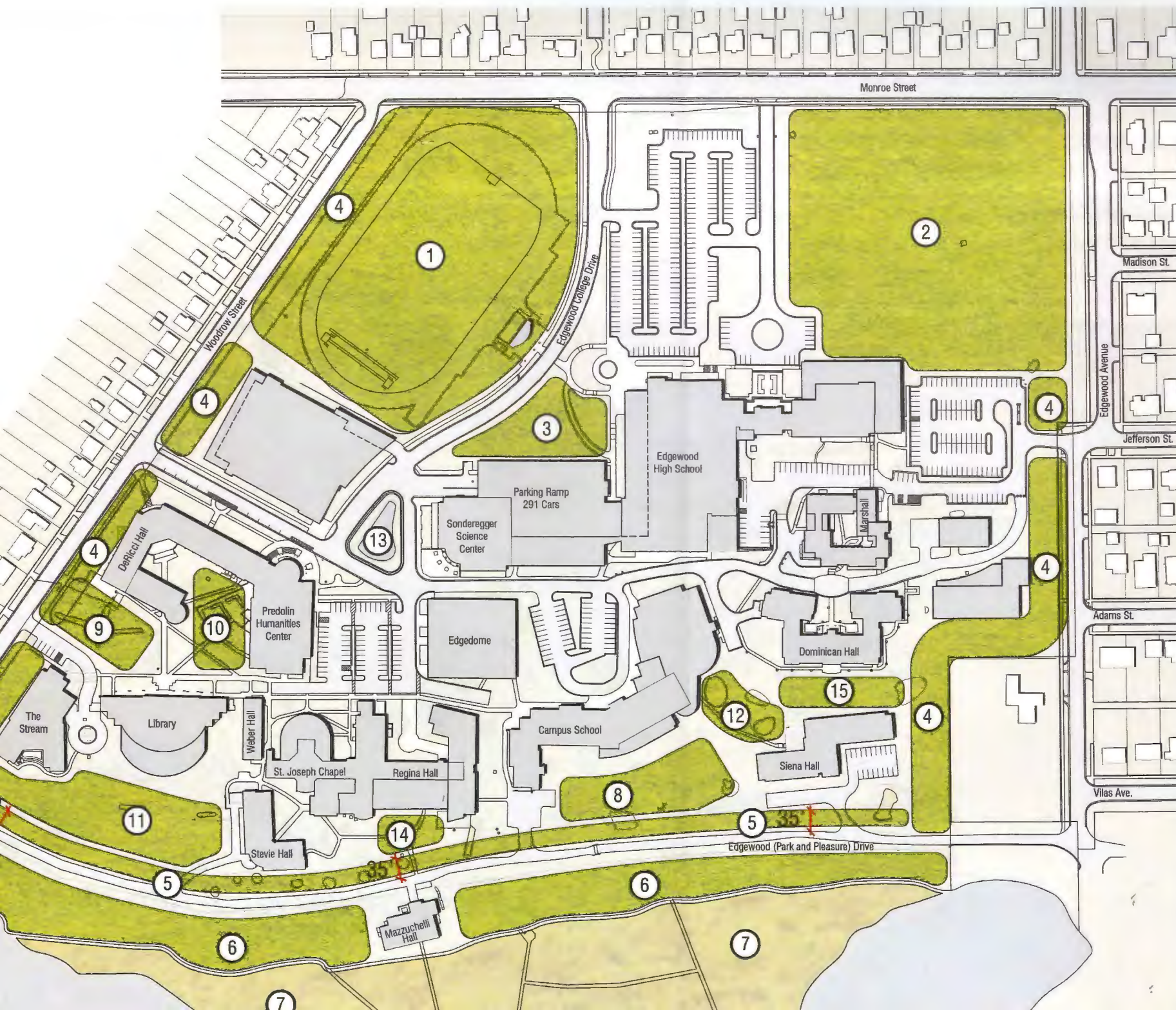
- ① **Future Facility & Structured Parking**
Approx: 80,000 sf program space
241 parking stalls on two levels
- ⑬ **Sienna Hall Replacement Residence Hall**
Approx: 36,000 sf
3 levels, facing south
2 levels, facing north
Potential for 70-85 beds
- ⑭ **New Non-Residential Building**
Approx: 54,000 sf
3 levels
- ⑯ **New Non-Residential Building**
Approx: 12,000 sf
2 levels

- Existing Buildings
- 2010 Campus Plan Proposed Additions/Expansions
- Setback Area

Note: Building set back dimensions are shown from the building edge to the face of curb at streets and to the property line at Kubly's property.

* Dimension to Property Line

Perimeter Building Setback Diagram
Edgewood Campus Plan
September 19, 2014










Open Spaces

1. Athletic Fields and Recreation Space
2. Athletic and Recreation Space
3. Recreation Space and Stormwater/
Snow Management for Parking Ramp
4. Neighborhood Buffer Zone
5. Edgewood (Park and Pleasure) Drive Landscape
Buffer Zone - 35' From Edge of Drive Pavement
6. Shoreland Zone
7. Wetlands
8. Playground
9. Eagle Mound
10. Courtyard Activity Space
11. Woodlands - Contemplative Space
12. Mound Grouping
13. Stormwater Retention Water Feature
14. Recreation Space
15. Green Space

Open Green Space

Campus School	
Surface Stalls: 0	
Covered Stalls: 0	
	0

-  Existing Buildings
-  2010 Campus Plan Proposed Additions/Expansions
-  Native American Mound
-  Existing External Bicycle Parking
-  Existing Internal Bicycle Parking
-  Future External Bicycle Parking
-  Future Internal Bicycle Parking



1/2/2014

Campus Master Plan			
Addition	Description	Proposed Impervious Area	Removed Imp. Area
1	Future Facility & Structured Parking	55,000 sf	48,184
2	DeRecci Hall Expansion	5,500 sf	740
3	Library Expansion	6,700 sf	0
4	Chapel Expansion	5,300 sf	740
5	Regina Hall Western Expansion	4,000 sf	980
6	Dining Expansion	6,000 sf	4,120
7	Regina Hall Eastern Expansion	19,727 sf	9,922
8	Edgedome Expansion	22,500 sf	15,444
9	Sonderegger Expansion	9,100 sf	700
10	Campus School Expansion	26,000 sf	6,000
11	High School Southern Expansion	3,400 sf	1,380
12	High School Eastern Expansion	10,300 sf	3,740
13	Siena Hall Replacement	19,400 sf	4,400
14	New Non-residential Building	14,000 sf	0
15	Marshall Hall Expansion	9,600 sf	10,390
16	New Non-Residential Building	9,300 sf	0
17	Additional Parking (30)	7,900 sf	0
-	Total Proposed Impervious Area =	233,727 sf	106,740

Proposed Storage req'd by "first 1/2" method" =	9,739 cf
Existing amount of site dedicated to SWM =	15,550 sf
Existing stormwater features to be removed =	2,290 sf
Ultimate Total Site Area dedicated to SWM =	22,999 cf
Total Site Area =	2,121,210 sf
Total area for SWM as a % of site =	1.08%



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Professional Seal

Revision Date
 AREA F 12/09/2013

Project Name

EDGEWOOD
 COLLEGE
 STORM WATER
 MANAGEMENT
 PLAN

CITY OF
 MADISON,
 WISCONSIN

Drawn By: MF
 Checked By: JL
 File: P-SWM
 Issued For: FINAL REPORT
 Date: 01/02/2014
 Project No. 2495

Sheet Title
 STORM WATER
 TREATMENT
 LOCATION MAP

0 50 100 200
 Sheet Number

C1.0

A.2

**TRANSPORTATION
MASTER PLAN**

Edgewood Campus Transportation Master Plan Madison, Wisconsin

March 2014



**Prepared for
Edgewood Campus**

**Completed by:
SAA Design Group
101 East Badger Road
Madison, WI 53713
www.saa-madison.com**

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Appendix

1. Introduction

Edgewood Campus is a 55-acre site located in Madison, Wisconsin that is comprised of three educational institutions: Edgewood College; Edgewood High School; and the Edgewood Campus School, an elementary and middle school. The three entities comprising the Edgewood Campus have completed a Campus Master Plan articulating future building and programming. As a part of this effort, the transportation impact of the master plan was in need of updating and analyzing. The component includes three segments; the traffic impact, parking impact, and the development of a Transportation Demand Management (TDM) program.

This study of Edgewood Campus serves four purposes: (1) assess the impact and extent of improvements the campus has implemented since the last transportation study in 2006; (2) evaluate the traffic impacts that the proposed future master plan improvement will have on the street network and recommend any improvements needed to accommodate site traffic; (3) assess the impact that the proposed master plan will have on parking conditions onsite and on the adjacent streets and recommend any measures that will alleviate the parking demand experienced presently and in the future; and (4) evaluate the campus's existing TDM program and make any recommendations for additional measures to reduce vehicular demand.

2. Executive Summary

The Master Plan Traffic Impact Analysis completed in 2005 demonstrated that as compared to a 1992 study, traffic volumes at the campus site have significantly shifted to the signalized Edgewood College Drive while removing traffic along Woodrow Street and Edgewood Avenue. The updated 2012 Master Plan Transportation Study shows that an aggressive Transportation Demand Management (TDM) has resulted in a reduction in both parking and peak hour trip demand. In addition, the participation in the TDM elements, such as transit ridership, remote parking, and van pooling has almost doubled since 2006/2007.

The projected enrollment increases for the campus can be accommodated with modest increases in parking, minor improvements to the existing infrastructure, and additional TDM measures. No additional street and/or intersection improvements are required as a direct result of traffic generated by Edgewood Campus. The campus will continue to make a conscious effort to increase transit ridership and promote remote parking facilities, which should continue to be encouraged in the future. Recommended traffic demand management (TDM) measures such as remote parking, long-term parking lots, and offsite classes could further reduce the traffic and parking loads experienced by the campus during peak conditions and should be considered for implementation.

3. Overview of Edgewood Campus

Campus Population

Discussions with staff from the three institutions were conducted to determine the existing student, faculty, and staff populations during the 2012 / 2013 school year. For comparison purposes, campus population data was also included from the 1993 / 1994 and 2004 / 2005 school years (as cited in previous studies of the campus, which will be discussed in greater detail below). **Table 1** illustrates a comparative analysis for the campus between the three time periods as well as future projected enrollments and staffing for each of the three campus institutions.

Table 1
EDGEWOOD CAMPUS POPULATION COMPARISON

Population	Year 1994 ¹	Year 2005	Year 2012	Projected 10 year
Edgewood College				
Total Students	1,787	2381	2,252	2,660
<i>Total Beds</i>	280	350	553	800
Faculty & Staff	— ²	450	468	504
Edgewood High School				
Students	535	594	593	650
Faculty & Staff	— ²	88	106	125
Edgewood Campus School				
Students	265	304	275	300
Faculty & Staff	— ²	30	30	33

1 Data obtained from Mead & Hunt study (1995)

2 Data not cited in study

As can be seen in **Table 1**, since the last study in 2005, the enrollment at the high school has remained the same while there has been a modest increase in faculty and staff. The enrollment at the college and campus school has decreased. The overall campus population has decreased about 4% between 2005 and 2012. The projected enrollments for the total campus are expected to increase by 15% over the next 10 years. Likewise the number of student on-campus residents will increase from 553 to 800.

Previous Studies of Edgewood Campus

Three previous studies have been conducted for Edgewood Campus that evaluated traffic and parking conditions onsite and in its vicinity. In 1995, Mead & Hunt performed a traffic impact study to project full build out of the Campus (based on the Master Plan) and to recommend any improvements needed to accommodate this growth. One recommendation implemented was the construction and signalization of a primary access drive to serve the campus (which became Edgewood College Drive) from Monroe Street. In 2006, SAA performed a traffic and parking study of the Campus to evaluate parking conditions at and around the site as well as recommend any parking management procedures that would reduce the parking demand experienced in the area. Several recommendations from this study that were implemented include a restriction of freshmen obtaining parking permits, increased enforcement of parking violators, and event coordination between the three institutions. This 2006 study also documented the impact of access improvements and it found that the traffic volumes on Woodrow at Monroe Street had decreased by 50% while the traffic volumes at the main signalized intersection at Edgewood Drive had increased by 115%.

This study also determined that off street parking on campus was at capacity (over 90%) at peak times and on street parking in the neighborhood ranged between 53-60% of capacity. The study also projected that construction of additional housing on campus would reduce the overall trip demand in the campus area due to the reduction in commuting traffic volumes.

4. Existing Conditions

To evaluate and compare the existing traffic and parking conditions at Edgewood Campus with previous studies, a field review was conducted to ascertain existing traffic and parking characteristics at and around the campus site. These included land uses surrounding the campus; streets and intersections that will be impacted by the expansion; the supply of parking areas onsite and offsite (on-street); existing traffic volumes that are experienced in the vicinity of the site; and existing parking demands generated by Edgewood Campus.

Study Area

As previously stated, Edgewood Campus is a 55-acre, institutional site located in Madison, Wisconsin. Specifically, the site is located on the southeast side of Monroe Street between Woodrow Street and Edgewood Avenue. Land uses in the immediate vicinity of the site comprise of residential homes to the north, east, and west, Henry Vilas Park to the east, Lake Wingra to the south, and Wingra Park to the west. **Figure 1** shows the location of Edgewood Campus with respect to the surrounding streets.

Traffic Operations – External Streets

The following lists the principle streets that currently serve the Edgewood Campus site:

Monroe Street is a southwest-to-northeast, two-lane, undivided street that serves as the primary travel path to and from Edgewood Campus. No exclusive turning lanes are provided on Monroe Street at intersections in the vicinity of Edgewood Campus. Monroe Street permits on-street parking on both sides of the street; however, parking is restricted on the southeast side from 7:00 to 8:30 A.M. (providing two northeast bound lanes on Monroe Street during the weekday morning peak traffic period) and on the northwest side from 4:00 to 5:30 P.M. (providing two southwest bound lanes on Monroe Street during the weekday evening peak traffic period). Monroe Street has a posted speed limit of 25 miles per hour and is under the jurisdiction of the city of Madison.

Woodrow Street is a north-south, two-lane street that runs from Edgewood Drive north to its terminus at Monroe Street. No exclusive turning lanes are provided along Woodrow Street with all movements from Woodrow Street at Monroe Street under stop-sign control. On-street parking is permitted on the west side of Woodrow Street from an Edgewood Campus access drive to Monroe Street while on-street parking is permitted on the east side from Edgewood Drive to the Edgewood Campus access drive. Woodrow Street is under the jurisdiction of the City of Madison.



Figure 1: Site Location and Existing Street Network

Edgewood Avenue is a northwest-to-southeast, two-lane street that runs from Henry Vilas Park north to its terminus at Fox Avenue. North of Fox Avenue, the street is known as Allen Street. At its unsignalized intersections with Edgewood Drive, Vilas Avenue, and Jefferson Street, no exclusive turning lanes are provided. At its unsignalized intersection with Monroe Street, Edgewood Avenue is offset with its north approach located southwest of its south approach. The north approach does not provide any exclusive turning lanes while the south approach consists of an exclusive left-turn lane and an exclusive right-turn lane. All movements from Edgewood Avenue at the Monroe Street intersection are under stop-sign control. On-street parking is permitted on the east side of Edgewood Avenue from Jefferson Street to Keyes Avenue.

Edgewood Drive is a southwest-to-northeast, unimproved street that runs from Woodrow Street to its terminus at Vilas Park Drive. At its unsignalized intersection with Edgewood Avenue, no exclusive turning lanes are provided the street with all movements from Edgewood Drive under stop-sign control. Parking is prohibited on both sides of Edgewood Drive, which has a posted speed limit of fifteen miles per hour.

Jefferson Street is a southwest-to-northeast local street that runs from Edgewood Avenue to its terminus at Regent Street. At its unsignalized intersection with Edgewood Avenue, no exclusive turning lanes are provided with all movements from Vilas Avenue under stop-sign control. On-street parking is permitted on both sides of Jefferson Street.

Traffic Operations – Edgewood Campus

Primary access to Edgewood Campus is served by Edgewood College Drive, a north-south, two-lane street that connects Monroe Street to various buildings and parking areas on-site. At its signalized intersection with Monroe Street, Edgewood College Drive provides an exclusive left-turn lane and exclusive right-turn lane. Parking is prohibited on Edgewood College Drive, which has a posted speed limit of fifteen miles per hour.

In the center of the campus site, Edgewood College Drive intersects an east-west circulation drive that connects Woodrow Street to the west with various buildings and parking areas onsite. At its unsignalized intersection with Woodrow Street, this circulation drive permits westbound-to-northbound, right turn movements only. This condition reduces the traffic load along Woodrow Street south of the circulation drive as well as along Edgewood Drive.

Secondary access drives to Edgewood Campus site connect Monroe Street, Edgewood Avenue, and Edgewood Drive to ancillary parking lots located onsite. These access drives provide one inbound lane and one outbound lane with outbound movements under stop-sign control.

Figure 2 identifies and illustrates the existing traffic operations within Edgewood Campus as well as in the vicinity of the site.

Parking Operations

The Edgewood Campus site provides numerous parking areas onsite for students, faculty, and staff of the three institutions. The parking areas for these institutions is described below and also illustrated in **Figure 3**.

The Edgewood Campus provides 894 common use parking lots for students (residents and commuters), faculty, and staff to utilize. This is an increase of 40 spaces over the 854 parking spaces provided in 2005.

Edgewood College

Edgewood College provides 596 common use parking lots for students (residents and commuters), faculty, and staff to utilize. Two primary surface parking lots for the college are provided along the campus's western frontage while a parking structure for use by the college is located in the center of the campus site. Ancillary parking lots are also located along the eastern and southern frontage of the campus. The parking lot on the east side of the high school is restricted for faculty parking only.

Edgewood High School

Parking for students of Edgewood High School is accommodated via two surface parking lots located on the east side of Edgewood College Drive, south of Monroe Street. Parking for faculty and staff of the high school is provided via two ancillary parking lots that connect to Edgewood Avenue. The total surface parking lots comprise 261 spaces.

Edgewood Campus School

37 parking spaces for the campus school is provided by a surface parking lot located in the center of the site and are accessed by the east-west circulation drive.

In addition, numerous streets surrounding Edgewood Campus provide on-street parking on both sides of the street, which are shown in **Figure 3**.

Existing Public Transportation and Multi-Modal Routes

Currently, Monroe Street is utilized by the Madison Metro Transit System (Metro) for several bus routes that serve the Edgewood Campus site. Bus routes 3 and 58 travel along Monroe Street with bus stops at Edgewood Avenue and Edgewood College Drive. Based on 2012 data from the College, annual ridership to and from the campus are approximately 103,000 rides, significantly reducing the traffic and parking load to the campus. In addition, the Wingra Park bicycle route is identified along Monroe Street, Woodrow Street, and Edgewood Drive. The aforementioned bus and bicycle routes are shown in **Figure 4**.

Figure 2



Edgewood Campus Traffic Impact Analysis
Existing Traffic Operations – Weekday Morning Peak Hour

FIGURE 2
Project #2082 May 2005

Figure 3 On and Off Site Parking



Figure 4



Edgewood Campus Traffic Impact Analysis

Existing Multi-Modal Transportation Routes

FIGURE 4
Project #2062 May 2005

Existing Traffic Volumes

To determine the existing traffic volumes that are generated on the adjacent street network, peak hour traffic counts were conducted at several intersections surrounding the Edgewood Campus site. The location and dates of the counts is summarized below in **Table 2**. It should be noted that classes at all institutions were in session at the time of the counts. Counts were conducted from 7:00 A.M. to 8:30 A.M. to capture both peak weekday morning commuter traffic as well as inbound trips to Edgewood Campus. Counts were not conducted during the weekday evening peak period for the peak outbound period of the campus occurs before the weekday evening commuter peak hour (4:30 to 5:30 P.M.), resulting in traffic conditions that may not reflect peak traffic periods. The results of the counts indicate that the weekday morning peak hour of traffic occurred from 7:30 to 8:30 A.M. These volumes represent baseline conditions for analysis of existing and future traffic conditions and are illustrated in **Figure 5**.

Table 2
INTERSECTION COUNT LOCATION

Location	Date of Counts
Monroe Street & Edgewood Campus Drive	November, 2012
Monroe Street & Edgewood Avenue	November, 2012

In addition to peak-hour turning movement counts, 24-hour daily counts were acquired to assess the daily traffic load of roadways surrounding Edgewood Campus. Daily counts along Monroe Street and Edgewood Avenue for various years from 1989 to 2011 were obtained from the City of Madison traffic maps. The results of this count, as well as historical counts, are illustrated in **Table 3** (Monroe Street) and **Table 4** (Edgewood Avenue).

As can be seen from these daily counts, traffic along Monroe Street peaked in the mid 1990's and have been on a slow decline ever since resulting in a decline today of about 20% of their peak. Traffic on Edgewood Avenue (south end) peaked in 1989 and are now at about 50% of that volume. In particular in **Table 4**, the timeframe for a number of the proactive measures implemented by the campus are also shown. This includes the introduction of student shuttle services in 2005, the closing of the Park and Pleasure Drive to through traffic in 2006, and the addition of additional on-campus student housing in 2007.

Table 3

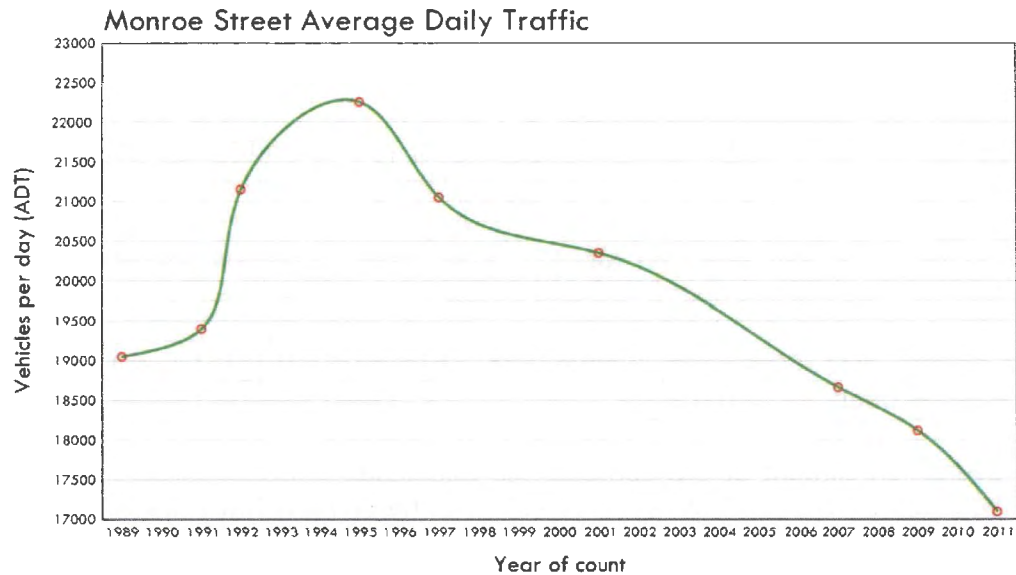
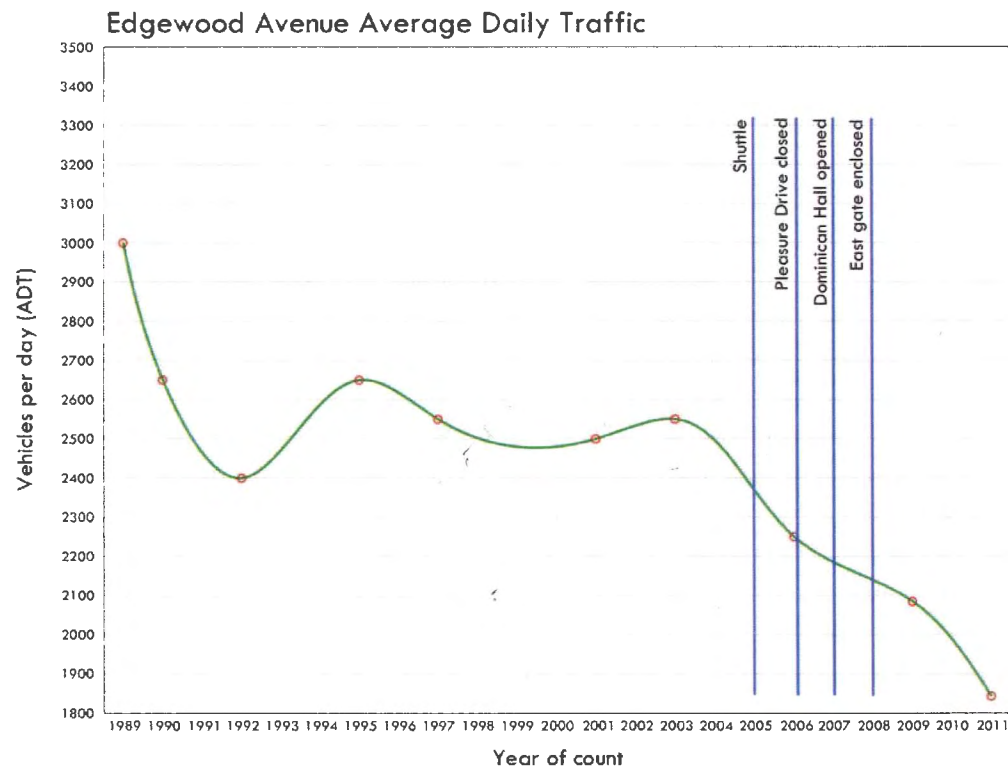


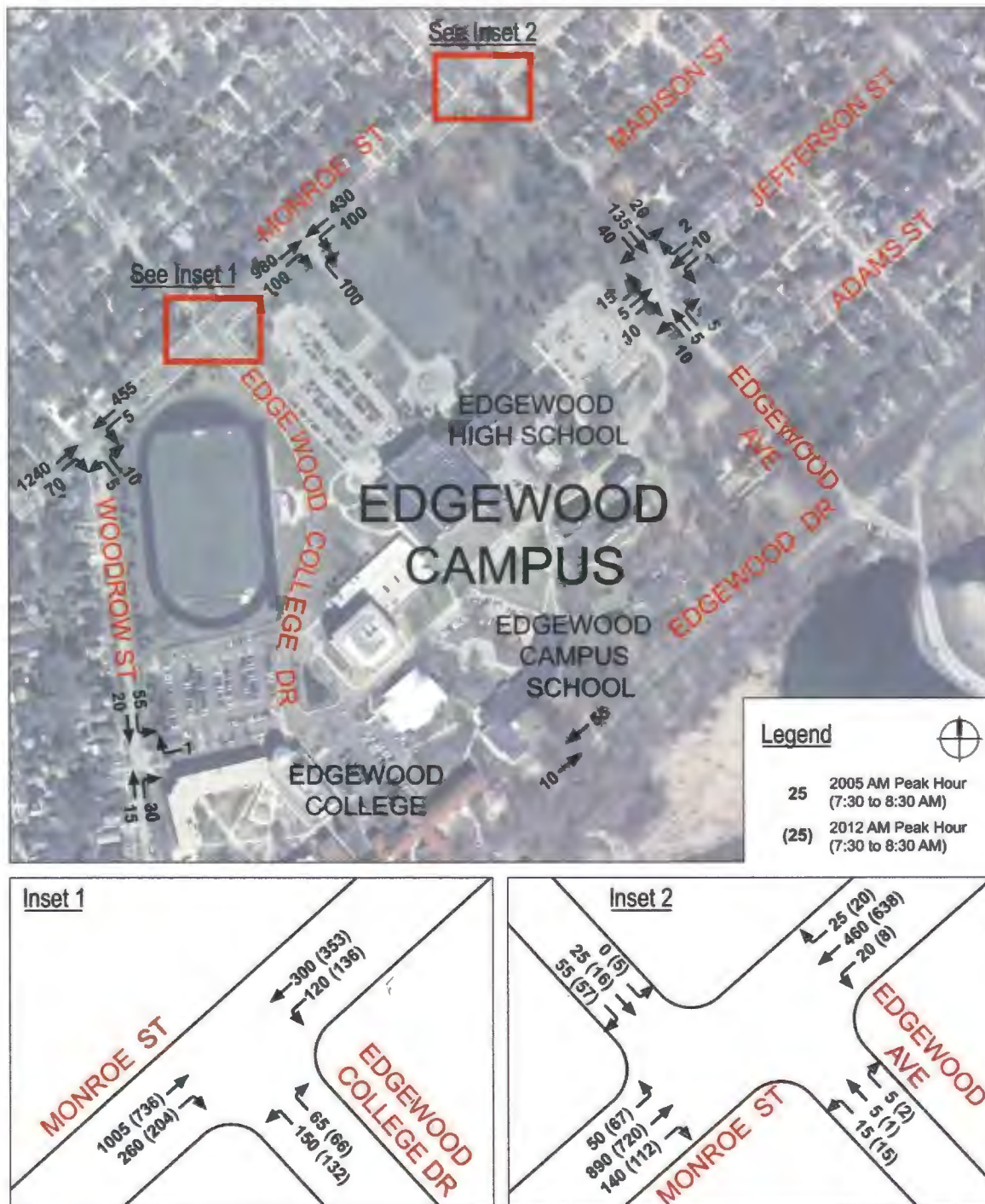
Table 4



As previously mentioned, a traffic impact study for Edgewood Campus was conducted in 2005. As part of that study, traffic counts at intersections surrounding the campus during the weekday morning peak hour were taken as shown in **Figure 5**. Traffic counts were again taken on several of the major intersections in 2012. When Year 2005 and 2012 intersection counts are compared the following is a summary of the results which are also shown in **Table 5**:

- The intersection traffic counts verify the peak hour counts on Monroe Street in the vicinity of the Edgewood Campus have decreased between 2005 and 2012.
- The morning peak hour flows on Monroe Street have increased southbound and decreased northbound between 2005 and 2012.
- Traffic counts onto Edgewood Avenue and Edgewood College Drive have both decreased between 2005 and 2012.
- While overall enrollment at the campus has decreased between 2005 and 2012, traffic volumes on the local streets and entering the campus have decreased even more.

Figure 5

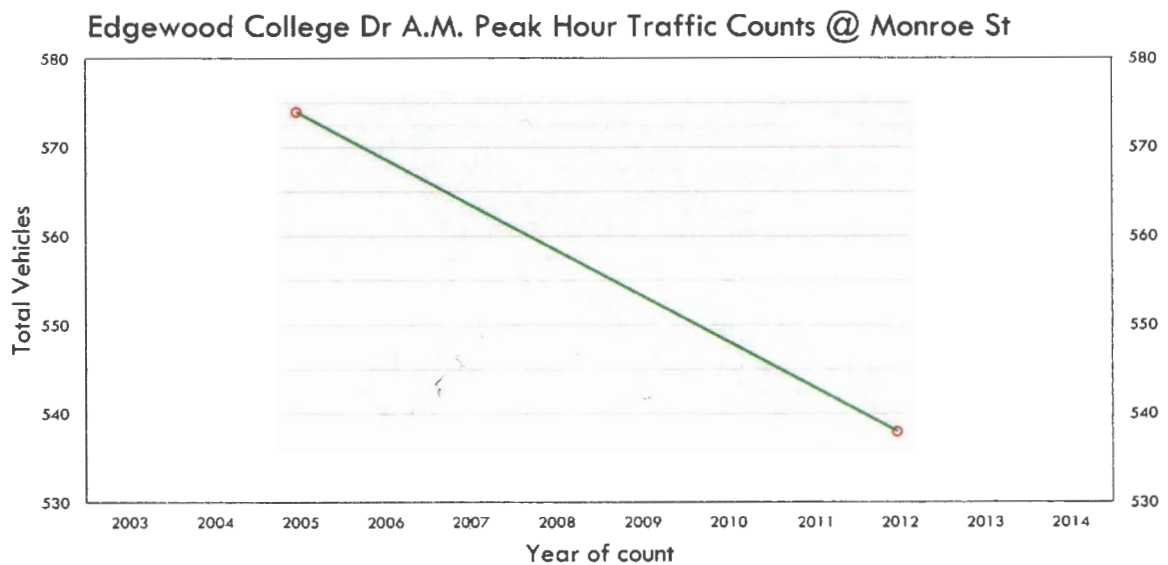
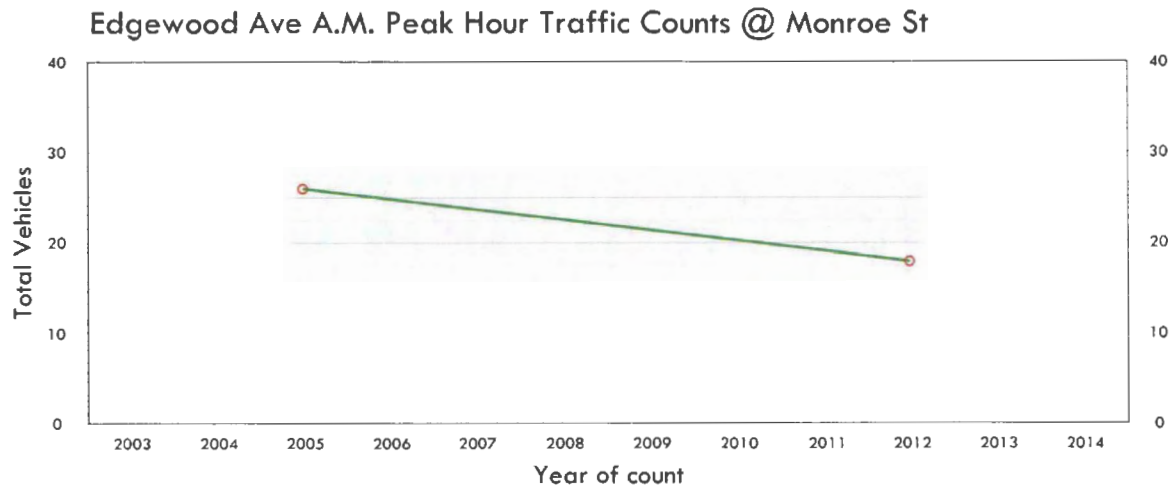


Edgewood Campus Traffic Impact Analysis

Year 2005 & 2012 Weekday Morning Traffic Volumes

FIGURE 5
Project #2082 May 2005

Table 5
SITE TRAFFIC VOLUMES – Edgewood Ave and Edgewood College Drive



Existing Parking Occupancy Demand

As previously stated, parking studies for Edgewood Campus were performed in 2002, 2005, and 2012. These studies involved a parking occupancy count of all on-campus and off campus (on-street) parking areas. Counts were conducted during the weekday midday (11:00 A.M. to 2:00 P.M.) time period as this time period experiences the highest parking demand for institutional land uses. To provide a comparative analysis of parking conditions the parking occupancy count was conducted midweek during the aforementioned peak parking period. The count locations consisted of the same on-campus and off-campus parking locations as counted in the previous parking study. The results of these counts, which can be found in the appendix of this study, indicate that over both the on-campus and off-campus parking demand had been reduced from 2005 to 2012 as shown in **Table 6**. The 2005 off-campus parking peaked at 59 percent occupancy while this dropped to 55% in 2012 for the areas within a 2-block radius of the campus during peak periods. The on-campus parking demand had also dropped to below 90% in 2012 as compared to 2005.

After the parking study was conducted, Edgewood College implemented a parking policy in which freshmen students could not obtain a parking permit for use of on-site parking spaces. Because of this, it was assumed that freshmen students that drove to campus would be forced to utilize parking on the surrounding streets within a two-block radius of the campus. This may have resulted in a six percent increase in on-street parking from Year 2002 to Year 2005. It should be noted, though, the student population of Edgewood College increased by approximately eight percent during this same time period. Given that parking conditions within Edgewood Campus operates at capacity during both time periods, this increase could be expected given that the increase in the student population will generate more commuters traveling to the campus site. As such, the restriction of freshmen parking within Edgewood Campus had a marginal impact to on-street parking characteristics. It is more likely that the increase in parking occurred due to the increase of the Edgewood College student population.

Following the 2005 study, the Edgewood Campus worked with the neighborhood in restricting on street parking areas within the two block campus area that was surveyed. These restrictions included limited time periods (e.g. 2 hr), restricted days (e.g. no parking on Tuesday, and full parking restrictions). The college also further implemented some of its TDM measures such as providing remote parking for its employees, off campus parking for residence halls, and hiring a TDM coordinator to implement a more aggressive TDM program.

For a comparison of the impact of the parking restrictions on the off campus streets, **Table 6** shows the occupancy demand if the streets with parking restrictions were removed from the parking supply which would increase the parking demand on the remaining streets to close to 70%. The implication being that the parking restrictions have pushed more of the parking onto the streets that do not have parking restrictions.

The overall maximum peak demand for off-campus parking has actually decreased by about 14% between 2005 and 2012.

To address concerns that overnight parking was occurring on the streets closest to the campus, an overnight parking survey was done on the first block of Jefferson Street. The results of that survey are shown on Table 7. This survey indicates that parking peaks mid morning and drops off during the day, picks up again in the early evening, and then falls off overnight.

Table 6 - Off and On-Street Parking Demand

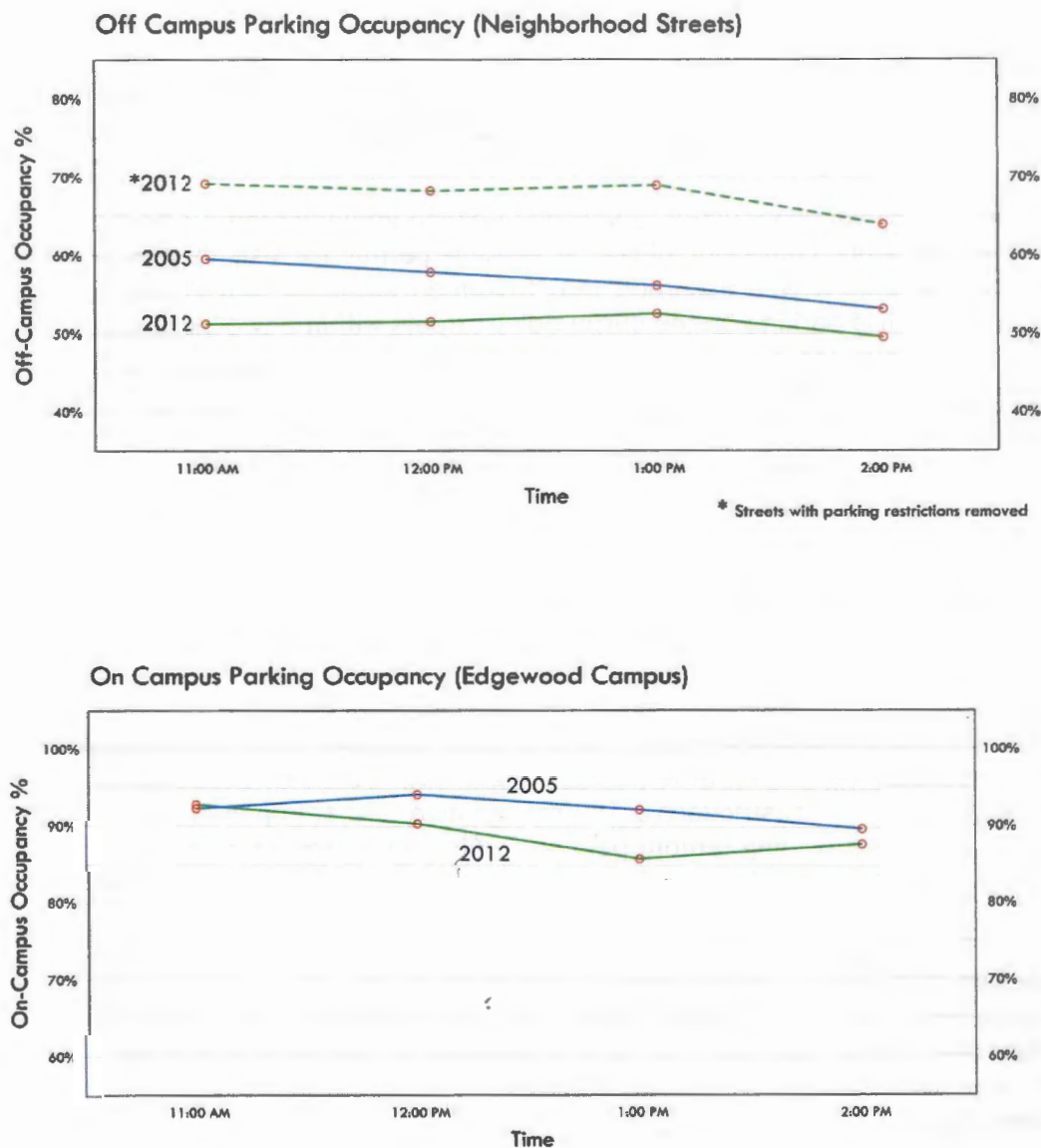
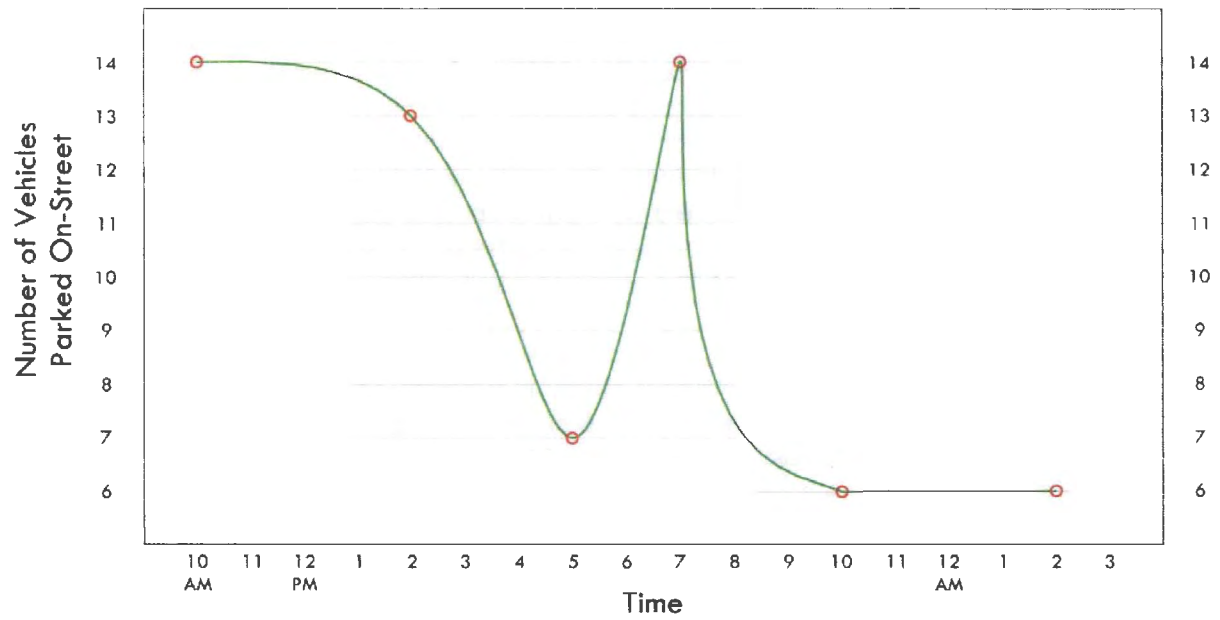


Table 7

Jefferson St Parking



5. Existing Transportation Demand Management (TDM) Methods

Overview of Ongoing Efforts

Transportation Demand Management (TDM) strategies represent a relatively new, but ever evolving, approach to transportation planning. TDM seeks to address transportation challenges, such as the need for adequate parking, with projects and programs that manage travel demand rather than respond with the supply of additional infrastructure. Research increasingly shows that TDM and parking management have had demonstrable and cost-effective success in influencing people's core travel choices and behaviors, thereby reducing vehicle trips, congestion, and vehicle emissions. All the while, TDM plays a critical role in improving mobility, accessibility, and the efficiency of local and regional transportation networks.

Beginning with Edgewood's 2005 master planning process, Edgewood College has made a substantial effort to implement TDM practices on its campus and is committed to continuing these and similar efforts as a matter of practice. Edgewood College's "Alternative Transportation Program" is a relatively comprehensive, institutionalized TDM approach that has grown since 2005 to be an increasingly effective contributor to reduced traffic and parking demand on and around the Edgewood Campus. On the next page, **Table 8** summarizes existing TDM/Alternative Transportation programs in place at Edgewood as of May 2013.

Table 8
TDM METHOD SUMMARY

Program/Policy/Practice	Description
First-year resident parking restriction	Resident students are not eligible for an on-campus parking pass their first year on campus; must participate in Alternative Transportation Program
New-hire parking restriction	Newly hired employees are not immediately eligible for an on-campus parking permit; are expected to participate in Alternative Transportation Program
Parking & Transportation Coordinator	In 2008, the college added full-time administrative staff to oversee and grow the college's Alternative Transportation Program
Commuter Shuttle/Off-site Parking	Since 2006, the college has offered a free shuttle to remote parking lots for students, faculty and staff
Safe Ride Shuttle	Since 2007, the college has provided a free shuttle on weekend evenings (Thurs - Sat) between campus and nearby commercial, dining, and entertainment areas
Shopping Shuttle	The college provides a free shuttle to shopping destinations (West Towne Mall, Hilldale, Target) on designated days
Increased enforcement of parking violators	The college continues working with the Madison Police Department to bolster enforcement of on-street parking regulations around the campus
Provide Metro transit passes to all students, faculty, and staff of Campus	All valid Edgewood ID's can be used as a Metro transit pass and is paid for by the college
Carpool Program	The college offers reduced-cost parking permits and preferential parking location for registered carpool participants
Incentive Program	All users of shuttle, carpool, and registered walkers/bikers eligible for a "punch card" which can be redeemed for gift cards, movie passes, and other benefits
Continued bike/pedestrian encouragement	The college continues to expand bike and moped parking on-site, and has a registered walker and biker program that ties to the incentive program above

TDM Impacts (2005 – 2012)

Edgewood College's efforts at accommodating and encouraging alternatives to the single-occupant vehicle for travel to and from its campus have had measurable success, as evidenced in the previous section of this report. The following data further illustrate the success of the college's program, and offer rationale for continued support and enhancement of the Alternative Transportation Program:

- Peak hour trips to campus decreased by 10% between 2005 and 2012
- The number of commuter student parking passes issued by the college decreased from **860** passes in 2007 to **736** passes in 2012 ; resident parking passes remained stable at **123** total
- The number of free Madison Metro bus passes issued almost doubled from **1,442** in 2005 - 2006 to **2,173** in 2011 - 2012
- Metro trips utilizing the Edgewood pass program more than doubled from **40,000** in 2005 to **103,000** in 2012
- In five years, Commuter Shuttle registration increased by more than 75%, from **84** registered riders in 2007 to **150** registered riders in 2012
- Safe Ride Shuttle usage has more than doubled, from a total of **7,047** rides in 2008 to **14,096** rides in 2012; the program now averages over 500 riders per weekend

While the college has utilized TDM to realize success in reducing demand for parking and peak hour traffic, Edgewood High School and Campus School have so far been less involved in TDM implementation. The primary concern at the high school and campus school level is indicated as being the broad geographic distribution of both institutions' populations throughout southern Wisconsin. Still, both schools were engaged in this process and expressed an interest in exploring TDM measures in the near future.

6. Characteristics of the Campus Master Plan

Projected Trip Generation

The amount of site traffic to be generated by a particular site is based upon the land use and size of the site. Projected trip generation rates were estimated based on the ITE Trip Generation Manual in **Appendix A** for each of the three institutions on campus. It is estimated that the additional enrollment (**Table 1**) over the next 10 years based on the Master Plan will increase by 78 trips or 7% over current estimated campus peak hour trip generation. This projection is less than the projected increase in enrollment due to the additional residence halls that will be added as well as the continued success of the TDM program.

Projected Parking Generation

In addition to the traffic impacts that the proposed Master Plan will have on Edgewood Campus, consideration was given to analyze the parking impact that the additional student enrollment will demand. Several sources were utilized to project the amount of parking needed to accommodate the residence halls, which are described below:

- Parking rates published in the ITE *Parking Generation Manual, 3rd Edition* and shown in **Appendix B** for each of the three institutions. This would result in the need for 161 additional parking spaces. This would include 133 additional spaces for the college and 28 additional spaces for the high school and campus school.
- Parking supply ratios developed in the 2002 parking study of the campus which state that a ratio of 0.22 parking spaces per student/faculty/staff exists onsite; with the addition of 548 additional students and faculty, this would result in 120 additional parking spaces over the current supply. This ratio reflects the parking supply ratio upon full build-out of the Campus, as cited in the Master Plan.

From the aforementioned sources, a range of projected parking demand from 120 to 161 parking spaces was derived. For purposes of this study, it was assumed that the parking demand generated by the increase in student population will be similar to existing demand ratios already experienced onsite. Therefore, the provision demand for an additional 161 parking spaces will result in the need to increase the existing parking supply by 18%.

7. Future Conditions

In order to evaluate the traffic and parking impacts of the proposed residence halls, the adjacent intersections and streets were analyzed based on the estimated volumes of existing background traffic and ambient growth on the street network. In addition, the parking supplies were analyzed based on existing parking demands of the campus as well as the projected parking demand of the residence halls. From these analyses, recommendations were developed for street improvements and onsite parking facilities.

Future Roadway Improvements

Based on discussions with MDOT staff, there are no improvements to streets and intersections in the vicinity of Edgewood Campus that are currently under consideration.

Edgewood Drive

Edgewood Drive is a two-lane, unimproved street that runs along the southern frontage of Edgewood Campus. Currently, Edgewood Drive has trees and vegetation that grow just outside the traveled way, creating narrow travel lanes and restricting traffic flow. In addition, bicyclists and pedestrians frequently use the travel lanes due to the lack of sidewalks or other adequate paths along Edgewood Drive. Historical traffic counts indicate that traffic volumes on Edgewood Drive East have decreased and at their current volumes do not warrant any further improvements.

Monroe Street & Edgewood Avenue Intersection

Based on MDOT's Year 2012 Traffic Signal Priority List, the intersection of Monroe Street with Edgewood Avenue is currently ranked twelfth among similar intersections for consideration of installing traffic signals for traffic control. However, all intersections must meet minimum traffic requirements (warrants) to be considered for traffic signalization. Currently, volumes at this location do not meet any of the required warrants necessary to be considered for signalization. There were also no recorded accidents at this intersection that would have been preventable if a traffic signal were in place. In addition, the existing geometric design of this intersection would need to be modified to accommodate traffic signals as well as the dedication of land by the campus to align the approaches of Edgewood Avenue. Future studies of this intersection can continue to be conducted to determine whether volumes at this location will require traffic signals.

Because it is unknown if these improvements will be constructed, if even at all, these improvements **will not** be assumed under analysis of future conditions for this study.

Monroe Street & Edgewood Drive Intersection

This intersection is currently signalized. MDOT has reviewed traffic operations, particularly the southbound left hand turn movement and the possible removal of additional parking during the afternoon peak hour to better accommodate turning movements. To date these analysis have not shown that there is a turning movement problem at this intersection nor that the removal of additional parking would result in any operational improvement of the intersection.

Traffic Impact Analysis

To determine the impacts that the proposed Edgewood College Master Plan will have on the adjacent street network, as well as any subsequent street and/or intersection improvements needed to accommodate site traffic, intersection capacity analyses were conducted at impacted intersections under existing and future conditions. **Table 9** illustrates the intersection level of service (LOS) and projected intersection delay under 2005, 2012 and future (2022) traffic conditions at intersections in the immediate vicinity of the Edgewood Campus. Intersection LOS is a letter designation that describes traffic operations at a given intersection. These designations range from LOS 'A' (unimpeded traffic flow) to LOS 'F' (extreme delays). Intersection delay is the projected amount of time that a vehicle would need to travel through the intersection. Intersection delay is measure in seconds of time. To analyze the impacted intersections, the software package Synchro was utilized.

It should be noted, though, that the intersection level of service and delay considers all movements conducted at a particular intersection. While an intersection may have an overall satisfactory level of service, an approach or movement may still operate poorly. Likewise, an intersection may have a poor level of service because only one or two movements operate unsatisfactorily. For further explanation of intersection level of service and delay, as well as the capacity analysis worksheets, please refer to **Appendix**.

Table 9

INTERSECTION LOS AND DELAY SUMMARY – WEEKDAY MORNING PEAK HOUR

			Previous Conditions (Year 2005)											
Intersection	LOS	Delay	NEastbound			SWestbound			NWestbound			SEastbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Monroe Street & Edgewood College Drive ¹	B	19.8	-	B	B	C	C	-	D	-	B	-	-	-
			-	13	13	32	32	-	48	-	11	-	-	-
Monroe Street & Woodrow Street ²	A	0.3	-	A	A	B	A	-	D	-	D	-	-	-
			-	0	0	13	0	-	32	-	32	-	-	-
Monroe Street & Edgewood Avenue ²	A	4.6	A	A	A	B	B	A	F	F	F	E	E	E
			8.6	8.6	0.6	11	11	0	167	81	81	47	47	47
Edgewood Avenue & Jefferson Street ²	A	2.5	B	B	B	B	B	B	A	A	A	A	A	A
			10	10	10	11	11	11	3.8	3.8	3.8	0.7	0.7	0.7
Monroe Street & Site Access Drive ²	A	1.6	-	A	A	B	A	-	-	-	C	-	-	-
			-	0	0	13	0	-	-	-	15	-	-	-
Woodrow Street & Site Access Drive ²	A	7.2	-	-	-	-	-	A	-	A	A	A	A	-
			-	-	-	-	-	6.6	-	6.8	6.8	7.5	7.5	-
			Existing Conditions (Year 2012)											
Intersection	LOS	Delay	NEastbound			SWestbound			NWestbound			SEastbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Monroe Street & Edgewood College Drive ¹	B	11.7	-	B	B	B	B	-	A	-	A	-	-	-
			-	12	12	12	12	-	9.5	-	8.3	-	-	-
Monroe Street & Woodrow Street ²	A	0.3	-	A	A	B	A	-	D	-	D	-	-	-
			-	0	0	13	0.1	-	27	-	27	-	-	-
Monroe Street & Edgewood Avenue ²	A	3.1	A	A	A	A	A	A	F	F	B	D	D	D
			9.4	9.4	0.7	9.9	9.9	0	74	74	12	34	34	34
Monroe Street & Site Access Drive ²	A	1.8	-	A	A	B	A	-	-	-	B	-	-	-
			-	0	0	11	1	-	-	-	13	-	-	-
			Future Conditions (Year 2022)											
Intersection	LOS	Delay	NEastbound			SWestbound			NWestbound			SEastbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Monroe Street & Edgewood College Drive ¹	B	11.9	-	B	B	B	B	-	A	-	A	-	-	-
			-	12	12	12	12	-	9.7	-	8.4	-	-	-
Monroe Street & Woodrow Street ²	A	0.3	-	A	A	B	A	-	D	-	D	-	-	-
			-	0	0	13	0.1	-	27	-	27	-	-	-
Monroe Street & Edgewood Avenue ²	A	3.4	A	A	A	A	A	A	F	F	B	E	E	E
			9.4	9.4	0.7	9.9	9.9	0.1	80	80	12	36	36	36
Monroe Street & Site Access Drive ²	A	1.8	-	A	A	B	A	-	-	-	B	-	-	-
			-	0	0	11	1	-	-	-	14	-	-	-
1 Signalized Intersection			LOS – Level of Service											
2 Unsignalized Intersection			Delay – Measured in Seconds											

The results of the intersection capacity analyses indicate that all impacted intersections currently, and will continue to, operate adequately during the weekday morning peak hour with the exception of the intersections of Monroe Street with Woodrow Street and Edgewood Avenue. At these locations, outbound movements from the minor streets (Woodrow Street and Edgewood Avenue) experience longer than desired delays due to the high volume of traffic on Monroe Street not providing adequate gaps for turning movements to occur. This is not an uncommon situation, though, especially when minor streets intersect high-volume arterials, such as Monroe Street, under stop-sign control. In addition, a field review of these locations indicate that during the weekday morning peak period, vehicles from the minor streets did not experience significant delays to perform their turning movements; this observation, coupled with the low volumes of traffic projected at these minor streets during the weekday morning peak hour, indicate that no external roadway improvements are needed to accommodate future traffic conditions.

Parking Impact Analysis

Based on the aforementioned parking generation analyses, the full build of the Master Plan is projected to increase the off campus parking demand by 161 parking spaces. The Master Plan shows the potential to add an additional 198 spaces as a part of future constructing. These new spaces include a 30 space addition to the high school parking lot near Monroe Street, a vertical expansion of the existing parking deck to accommodate another 68 spaces, the construction of a two story parking ramp over the existing De Ricci surface lot with 95 additional spaces, and the reconfiguration of the Campus lot to accommodate another 5 parking spaces.

Internal Circulation

To accommodate pedestrian traffic and facilitate loading and emergency vehicles for the proposed residence halls, an internal circulation drive was constructed to connect the Edgewood Avenue surface parking lot with the existing circulation drive that serves Edgewood Campus School. To discourage the use of non-authorized vehicles, gates were installed at entry points of the drive. The gates can be opened to allow for loading purposes, emergency use, and the moving in and out of students from the residence halls. Refuse collection for the residence halls was centralized at a location that **does not** require the use of the circulation drive. These locations include the refuse collection area for the high school and by Siena Apartments.

Based on a field review of the campus, coupled with the results of the traffic counts, a significant number of student drop-offs occur at the high school and campus school during the weekday morning peak hour. Parents dropping off children at the campus school utilize Edgewood College Drive for direct access between the school and Monroe Street; however, parents dropping off children at the high school have a more convoluted route to access Monroe Street. While an access drive is provided to the high school from Monroe Street, this access drive prohibits left-turns onto Monroe Street from 7:00 to 9:00 A.M. Therefore, motorists at the high school drop-off area wishing to travel southwest on Monroe Street have to travel through the high school parking lot to access Edgewood College Drive for access to southwest Monroe Street. These motorists interact with vehicles using the parking lot as well as pedestrians walking from the parking lot to the high school, creating many conflict points between parked vehicles and cut-through traffic as well as between cut-through traffic and pedestrians. Therefore, consideration should be given to provide a more direct route to Edgewood College Drive from the high school drop-off area that will reduce or eliminate interaction between cut-through traffic and vehicles and pedestrians using the parking lot.

8. Traffic Demand Management (TDM) Plan

Anticipated Benefits

Edgewood College has committed to reducing parking demand and parking – both on campus and in their neighborhood - as a central theme in its future growth and development strategy. Furthermore, TDM aligns to the college's sustainability principles perfectly, and advances the college's goals and objectives in several ways, as highlighted below:

- **Congestion and Trip Reduction:** The data in this report indicate that TDM has been demonstrated to effectively reduce vehicle trips and associated impacts on campus and in the neighborhood. Reduced congestion and trip reduction equals reduced vehicle emissions, reduced commute times, improved quality of life, and end-user cost savings among other things.
- **Cost-effective** – TDM programs and parking reform have relatively low up-front capital costs and ongoing operating costs, when measured against capital costs such as roads and parking lots and structures. Additionally, the TDM proposed for Edgewood College largely seeks to leverage existing infrastructure, such as transit service, bicycle facilities, and shuttle buses. Effective parking management can serve as a component of funding for TDM, providing additional cost-effectiveness.

- **Quick results, long-term impacts** – capital projects – in addition to being costly – often take years to design, acquire permits, and construct. TDM can be implemented on a comparably fast timeline, and the impacts from TDM initiatives are often immediate and lasting. A comprehensive and well-integrated TDM positively influences travel behavior and mode choice by providing travelers with a reliable, affordable, and comfortable alternative to driving alone to and from their daily destinations.
- **Market and Political Viability** – large numbers of people within the region and at Edgewood College in particular already “participate” in TDM by choosing to ride a bike, taking a shuttle or bus, or carpooling. Increasingly, many private and public institutions and employers celebrate their TDM and other sustainability efforts and benefits as a means to attract quality employees and students. Couple the increasing acceptance (or even expectation) of alternative transportation choices with the benefits outlined above and it’s reasonable to say that TDM is a politically viable and market-savvy initiative for Edgewood College.
- **Regional Leadership** – Edgewood College has emerged as an innovative and responsive leader with respect to its contribution to regional sustainability, air quality, traffic congestion, livability, and quality-of-life.

Proposed TDM Program

The proposed TDM program is introduced with the dual purpose of bringing up-to-date previously completed plans for Edgewood College as well as to expand upon recommendations found in past plans and studies - specifically focusing on recommendations that are most viable for the entire Edgewood community and can leverage existing assets and investments.

Parking Measures

- *Increase remote parking for residents* – explore opportunities to expand off-campus parking to accommodate the projected growth in on-campus residents. Align shuttle service to accommodate needed resident access to their vehicle for work commitments and weekend trips.
- *Preferential car-free housing* – incentivize resident commitment to not having a car on campus by offering first choice of residential units on campus.

Transit/Shuttle Measures

- *Expand Metro pass program* – engage the Campus School and High School to participate in the free Metro pass program for its faculty, staff, and students. Explore

cost implications and the feasibility of financing through parking or other existing fees.

- *Expand commuter shuttle* – shuttle ridership has increased since its introduction, and indications are that an east or south shuttle/parking location is needed. Additionally, the three schools should explore the possibility of accommodating faculty and staff at the high school and campus school on the shuttle, and/or offering the shuttle on Fridays.

Carpooling Measures

- *Free carpool permit* – consider offering a free parking permit to any car that agrees to carry 3 or more riders to park in designated carpool lots. Continue the reduced cost carpool permit for 2 riders.
- *Preferred carpool parking* – the high school has expressed an interest in offering “preferred parking” for students who choose to carpool.
- *Shared Car service* – explore the potential to host an on-campus shared car service, whether operated through a commercial provider such as ZipCar or as an institutionally owned and operated service. A shared car could be used by those who don't bring a car to campus for incidental trips such as off-site meetings, personal appointments, etc.

Bicycling and Walking Measures

- *Bike Parking* – increase the availability and convenience of bike parking as the Master Plan is implemented. Consider providing covered bike parking to provide formalize and prioritize biker comfort and offer protection of bikes from the elements.
- *Lockers/Shower*s – provide dedicated lockers and showers accessible only to bicycle and other “human-powered” commuters.
- *BikeShare* – consider an on-campus shared bicycle service. This would work similarly to a shared car service (i.e., could be used for incidental trips). On some campuses, this type of program is run as a “recycle-a-bicycle” service, where individuals can donate a used bike to the institution which is then repaired as needed and offered for “check-out” by the campus population.
- *Bicycle Assistance Program* – provide conveniently located, free (or at least, inexpensive) bicycle maintenance, repairs, and parts on campus for bike commuters.
- *B-Cycle* – work with Madison B-Cycle to explore establishment of a B-Cycle station on campus. B-Cycle is a bike sharing service that allows users to check out bicycles for a certain period of time for a fee. Currently, B-Cycle has stations at Knickerbocker and Monroe and at Harrison and Monroe.

Other Measures

- *Incentive programs* – follow the college's lead and establish an incentive program for the high school and campus school populations.

- *Mopeds* – mopeds are becoming increasingly popular commute options, and take up much less “real estate” to park than do automobiles. Proactively provide convenient, safe, dedicated moped and motorcycle parking throughout the campus.
- *Hours/scheduling* – where feasible, offer flexible work schedules for staff and faculty throughout the campus to minimize peak traffic and parking demand, and consider balancing the college’s class schedules (such as increasing the number of Friday classes). Coordination among schools with respect to special events, programming, and class scheduling must continue to be a priority in order to minimize spikes in parking and traffic demand to the extent possible.
- *Online learning/teaching* – **especially at the college, on-line classes will only continue to increase in number and popularity. While there is no substitute for an in-person learning experience, some courses may lend themselves well to remote learning.**

9. Recommendations

Edgewood College has committed to an aggressive TDM program to reduce vehicle trips and parking on campus. The addition of housing on campus will reduce the amount of site traffic that will be generated particularly during the peak hour. Given the adequate traffic operations currently experienced surrounding the site, these conditions will likely continue with the addition of the residence halls and the student population as shown in the Master Plan. The reduction in overall traffic both on Monroe Street and Edgewood Avenue also provide additional capacity for campus growth. Finally, the Master Plan also shows the potential for adding more parking supply to the campus than will be created by the additional school enrollments further reducing the demand of off street parking.

10. Conclusion

This study examined the traffic and parking impacts of the proposed master plan which is projected to add 490 students to the campus and 247 student beds to Edgewood College Campus. The study analyzed the existing and future traffic and parking conditions upon buildout of the Master Plan. Modifications and improvements were developed to mitigate existing conditions and the impact that the proposed project will have on traffic and parking conditions in the area.

Based on the data collected and the analyses performed, the following conclusions were reached regarding the impact that proposed project would have on the adjacent street system:

1. The street and access recommendations cited in the previous Edgewood Campus Master Plan successfully reduced site traffic on the surrounding neighborhood streets and shifted this traffic to the main signalized Monroe Street access drive.
2. The addition of residence halls to Edgewood Campus will not adversely impact traffic operations on the adjacent street network. Conversely, the amount of site traffic projected to enter and exit the campus during the weekday morning peak hour will likely decrease as the future residents will no longer commute to campus.
3. Although construction of the residence halls and an increase in the on campus parking supply will likely reduce the parking demand on surrounding streets, other measures must be implemented to further reduce the traffic and parking demand within Edgewood Campus.
4. The implementation of a remote parking area for faculty and staff should continue to be encouraged as this may be more convenient for those who commute long distances.
5. The provision of a long-term parking area for students will allow residents to have vehicles onsite, but moves them away from high-turnover parking areas that are more accommodating for commuters and visitors.
6. The restriction of on-street parking areas has removed vehicles parked over long periods of time from on-street parking supplies.

Appendix

Appendix A – Traffic Projections

Appendix B – Parking Projections

Appendix C - Parking

- **2005 On-street and Off-street Parking Counts**
- **2013 On-street and Off-street Parking Counts Projections**

Appendix D – Explanation of Level of Service and Delay

Appendix E – Intersection Analysis Reports

Appendix F – Edgewood HS TDM Plan

Appendix G – Edgewood Schools Campus Transportation Plan Addendum

Appendix A: Traffic Projections

Based on ITE Trip Generation Model 8th Addition

College

2660-2252 =408 additional students

Subtract 247 additional on campus for 408 additional students for trips (161 students X .21 trips) is 34 additional trips during the morning peak hour

High School

650 - 593 =57 additional students at .42 trips per student during the morning peak

24 additional peak hour trips

Campus School

300- 275 =25 additional students at .81 trips per student during the morning peak

20 additional peak hour trips

Total additional am peak hour trips 78 trips

As a check assume .308 trips per student (all schools)

With 243 students that would mean 75 additional trips

Estimated existing peak hour trips generation

College

2252 x .21 trips= 473 trips during the morning peak hour

High School

593 x .42= 249 trips

Campus School

275 x .81 =223 trips

Total current trips

945 trips

Which corresponds with our existing trip count of 960 am peak hour trips

Appendix B: Parking Projections

Based on ITE Parking Manual, 3rd Addition

College

National average parking demand is .3 spaces per school population

Target parking space demand- $2720 \times .3 = 816$ spaces

Existing spaces= 596

Existing parking ratio- $596 \text{ spaces} / 2720 \text{ population} = .22$ spaces per population

Deficit= 220 stalls

Students

2252

Faculty and Staff

468

High School

Ave national parking demand is .26 spaces per student

$593 \times .26 = 154$ spaces

Existing spaces= 261 stalls

Existing parking ratio- $261 \text{ spaces} / 593 \text{ students} = .44$ spaces per student

Surplus of = 79 spaces

Students

593

Faculty and Staff

106

Grade School

Parking Demand is .11 spaces per student

$275 \times .11 \text{ spaces} = 30$ spaces

Existing stalls= 37 spaces

Existing Parking ratio- $37 / 275 = .13$ spaces per student

Surplus of 7 spaces

Students

275

Faculty and Staff

30

Overall Parking Demand

1114 spaces

Overall Campus Supply

894

Current overall campus deficit = 220 parking stalls

Appendix B continued

Edgewood Campus Projected Parking Demand

Based on projected enrollment, the following is the projected parking demand based on the master plan:

Edgewood College

444 additional students, faculty and staff

444 x .3 spaces= 133 additional parking spaces

High School

62 additional students

57 x .44 spaces per student= 25 spaces

Grade School

25 additional students

25 x .11 spaces= 3 additional spaces

Total projected additional spaces 161 parking spaces

APPENDIX C: ONSTREET & OFFSTREET PARKING COUNTS

EDGEWOOD CAMPUS
MADISON, WISCONSIN
WEDNESDAY, APRIL 27, 2005

ONSTREET PARKING LOCATIONS

Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	Total
11:00 AM	5	7	16	1	8	7	29	0	9	16	12	15	29	6	11	5	8	4	5	7	9	4	1	0	1	0	6	2	4	227
12:00 PM	5	7	15	1	7	7	29	0	7	16	10	16	29	6	9	5	9	4	4	8	8	4	2	0	1	0	7	1	4	221
1:00 PM	3	7	13	0	7	6	30	1	12	16	10	16	28	7	9	6	8	4	4	7	7	3	2	0	1	0	7	1	3	218
2:00 PM	3	5	11	0	6	6	29	0	12	15	10	16	28	7	9	7	8	4	3	6	7	3	2	0	1	1	6	1	3	209

Time	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	Total	Grand	% Occ
11:00 AM	0	2	6	2	3	5	13	2	12	8	3	3	7	3	3	5	2	17	20	5	22	18	5	6	0	5	4	5	7	193	420	59.6%
12:00 PM	0	3	7	1	3	6	13	4	12	5	3	2	5	2	3	1	0	17	20	4	23	20	7	6	0	7	3	5	5	187	408	57.9%
1:00 PM	0	1	7	1	2	5	12	4	9	4	3	4	5	2	2	0	0	14	22	7	22	20	7	6	0	7	3	4	5	178	396	56.2%
2:00 PM	0	1	5	2	3	4	11	5	10	3	3	2	6	2	2	0	0	17	17	7	22	17	5	5	0	5	2	4	6	166	375	53.2%

OFFSTREET PARKING LOCATIONS

Time	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Total	% Occ
11:00 AM	146	74	291	9	1	9	16	27	183	20	27	20	18	37	587	92.3%
12:00 PM	140	68	---	9	1	6	14	26	178	17	26	17	17	34	553	94.2%
1:00 PM	146	68	---	9	1	7	14	25	174	12	26	16	17	27	542	92.3%
2:00 PM	141	73	---	9	1	7	14	22	144	17	26	19	18	37	528	89.9%

COUNT LOCATIONS

- | | | |
|---|---------------------------------------|---------------------------------------|
| 1 NW Monroe (Terry - Woodrow) | 26 NE Van Buren (Adams - Vilas) | 51 SE West Lawn (Leonard - Edgewood) |
| 2 NW Monroe (Woodrow - Edgewood College) | 27 SW Van Buren (Monroe - Madison) | 52 SE West Lawn (Edgewood - Prospect) |
| 3 NW Monroe (Edgewood College - Edgewood) | 28 SW Van Buren (Madison - Jefferson) | 53 NE Leonard (Keyes - West Lawn) |
| 4 NW Monroe (Edgewood - Van Buren) | 29 SW Van Buren (Jefferson - Adams) | 54 NE Leonard (West Lawn - Monroe) |
| 5 SE Monroe (Terry - Woodrow) | 30 SW Van Buren (Adams - Vilas) | 55 SW Leonard (Keyes - West Lawn) |
| 6 SE Monroe (Woodrow - Edgewood College) | 31 NW Madison (Edgewood - Lincoln) | 56 SW Leonard (West Lawn - Monroe) |
| 7 SE Monroe (Edgewood College - Edgewood) | 32 NW Madison (Lincoln - Van Buren) | 57 NE Edgewood (Keyes - West Lawn) |
| 8 SE Monroe (Edgewood - Lincoln) | 33 SE Madison (Edgewood - Lincoln) | 58 NE Edgewood (West Lawn - Monroe) |
| 9 SE Monroe (Lincoln - Van Buren) | 34 SE Madison (Lincoln - Van Buren) | |
| 10 W Terry | 35 NW Jefferson (Edgewood - Lincoln) | |
| 11 E Terry | 36 NW Jefferson (Lincoln - Van Buren) | |
| 12 W Woodrow (Access - Monroe) | 37 SE Jefferson (Edgewood - Lincoln) | A College Lot along Woodrow |
| 13 E Woodrow (Edgewood - Access) | 38 SE Jefferson (Lincoln - Van Buren) | B College Lot in center of Campus |
| 14 NE Edgewood (Monroe - Madison) | 39 NW Adams (Edgewood - Lincoln) | C College Parking Garage |
| 15 NE Edgewood (Madison - Jefferson) | 40 NW Adams (Lincoln - Van Buren) | D College Lot along Woodrow |
| 16 NE Lincoln (Monroe - Madison) | 41 SE Adams (Edgewood - Lincoln) | E College Lot along Woodrow |
| 17 NE Lincoln (Madison - Jefferson) | 42 SE Adams (Lincoln - Van Buren) | F College Lot along Woodrow |
| 18 NE Lincoln (Jefferson - Adams) | 43 NW Vilas (Edgewood - Lincoln) | G Siena Apartments |
| 19 NE Lincoln (Adams - Vilas) | 44 NW Vilas (Lincoln - Van Buren) | H College Lot along Jefferson |
| 20 SW Lincoln (Monroe - Madison) | 45 SE Vilas (Edgewood - Lincoln) | I High School Student Parking Lot |
| 21 SW Lincoln (Madison - Jefferson) | 46 SE Vilas (Lincoln - Van Buren) | J High School Drop-Off/Pick-Up Area |
| 22 SW Lincoln (Jefferson - Adams) | 47 NW West Lawn (Monroe - Leonard) | K High School Staff Parking Lot |
| 23 SW Lincoln (Adams - Vilas) | 48 NW West Lawn (Leonard - Edgewood) | L High School Staff Parking Lot |
| 24 NE Van Buren (Madison - Jefferson) | 49 NW West Lawn (Edgewood - Prospect) | M High School Staff Parking Lot |
| 25 NE Van Buren (Jefferson - Adams) | 50 SE West Lawn (Monroe - Leonard) | N Campus School Parking Lot |

APPENDIX C: ONSTREET & OFFSTREET PARKING COUNTS

EDGEWOOD CAMPUS
MADISON, WISCONSIN
WEDNESDAY, NOVEMBER 28, 2012

ONSTREET PARKING LOCATIONS

Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	Total
11:00 AM	9	7	16	3	8	11	31	6	13	20	20	18	29	7	4	6	6	4	4	3	6	3	2	0	1	2	6	2	4	219
12:00 PM	7	7	14	4	5	8	29	2	12	19	15	21	16	3	4	7	6	2	4	5	7	2	2	1	1	3	7	1	6	220
1:00 PM	5	6	16	3	7	11	28	2	11	17	15	21	16	3	4	6	6	5	2	6	7	2	3	0	2	3	7	1	6	221
2:00 PM	4	4	10	2	5	9	25	2	11	16	15	19	16	3	4	5	5	6	3	6	7	3	4	0	2	3	7	1	6	203

Total
310
217
218
220
202

Time	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	Total	Grand	% Occ
11:00 AM	5	2	2	3	0	5	2	6	1	1	1	1	2	2	10	0	6	18	16	0	21	18	0	0	0	3	0	2	4	131	350	51.3%
12:00 PM	5	1	4	3	2	6	2	4	2	2	0	1	2	1	8	0	6	17	15	0	22	18	1	0	0	4	0	1	5	132	352	51.6%
1:00 PM	5	1	5	4	2	4	3	5	1	1	1	2	2	0	10	0	4	19	16	2	23	17	2	0	0	3	0	1	5	138	359	52.6%
2:00 PM	4	0	3	2	2	5	4	3	1	1	1	2	4	2	8	0	4	18	19	4	20	15	2	0	0	3	2	1	5	135	338	49.6%

Grand	% Occ
461	
319	69.2%
315	68.3%
340	73.8%
304	65.9%

Time	30	7	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	Total	Grand %	% Occ	
	7		7	13	8	14	8	14	8	14	14	14	13	10	11	12	14	14	-4	25	26	12	25	24	12	7	5	7	5	7	8	368		682
11:00 AM	5	2	2	3	0	5	2	6	1	1	1	1	1	2	2	10	0	6	18	16	0	21	18	0	0	0	3	0	2	4	131	350	51.3%	
12:00 PM	5	1	4	3	2	6	2	4	2	2	0	1	2	1	8	0	6	17	15	0	22	18	1	0	0	4	0	1	5	132	352	51.6%		
1:00 PM	5	1	5	4	2	4	3	5	1	1	1	2	2	0	10	0	4	19	16	2	23	17	2	0	0	3	0	1	5	138	359	52.6%		
2:00 PM	4	0	3	2	2	5	4	3	1	1	1	2	4	2	8	0	4	18	19	4	20	15	2	0	0	3	2	1	5	135	338	49.6%		
10:00 AM							7		7																									
2:00 PM							6		6																									
5:00 PM							4		4																									
7:00 PM							3		3																									
10:00 PM							3		3																									
2:00 AM							3		3																									

OFFSTREET PARKING LOCATIONS

Time	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Total	% Occ
11:00 AM	143	66	-	9	2	4	16	5	180	9	72	16	18	37	577	92.0%
12:00 PM	136	64	-	8	2	4	16	7	183	8	73	12	17	32	562	89.6%
1:00 PM	143	61	-	7	2	4	16	7	175	5	75	12	0	27	534	85.2%
2:00 PM	137	64	-	5	2	4	16	4	163	12	73	13	17	37	547	87.2%

College total	596
High School total	261
Grade School total	37
Total	894

COUNT LOCATIONS

1 NW Monroe (Terry - Woodrow)	26 NE Van Buren (Adams - Vilas)	51 SE West Lawn (Leonard - Edgewood)
2 NW Monroe (Woodrow - Edgewood College)	27 SW Van Buren (Monroe - Madison)	52 SE West Lawn (Edgewood - Prospect)
3 NW Monroe (Edgewood College - Edgewood)	28 SW Van Buren (Madison - Jefferson)	53 NE Leonard (Keyes - West Lawn)
4 NW Monroe (Edgewood - Van Buren)	29 SW Van Buren (Jefferson - Adams)	54 NE Leonard (West Lawn - Monroe)
5 SE Monroe (Terry - Woodrow)	30 SW Van Buren (Adams - Vilas)	55 SW Leonard (Keyes - West Lawn)
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7 SE Monroe (Edgewood College - Edgewood)	32 NW Madison (Lincoln - Van Buren)	57 NE Edgewood (Keyes - West Lawn)
8 SE Monroe (Edgewood - Lincoln)	33 SE Madison (Edgewood - Lincoln)	58 NE Edgewood (West Lawn - Monroe)
9 SE Monroe (Lincoln - Van Buren)	34 SE Madison (Lincoln - Van Buren)	
10 W Terry	35 NW Jefferson (Edgewood - Lincoln)	
11 E Terry	36 NW Jefferson (Lincoln - Van Buren)	
12 W Woodrow (Access - Monroe)	37 SE Jefferson (Edgewood - Lincoln)	
13 E Woodrow (Edgewood - Access)	38 SE Jefferson (Lincoln - Van Buren)	
14 NE Edgewood (Monroe - Madison)	39 NW Adams (Edgewood - Lincoln)	
15 NE Edgewood (Madison - Jefferson)	40 NW Adams (Lincoln - Van Buren)	
16 NE Lincoln (Monroe - Madison)	41 SE Adams (Edgewood - Lincoln)	
17 NE Lincoln (Madison - Jefferson)	42 SE Adams (Lincoln - Van Buren)	
18 NE Lincoln (Jefferson - Adams)	43 NW Vilas (Edgewood - Lincoln)	
19 NE Lincoln (Adams - Vilas)	44 NW Vilas (Lincoln - Van Buren)	
20 SW Lincoln (Monroe - Madison)	45 SE Vilas (Edgewood - Lincoln)	
21 SW Lincoln (Madison - Jefferson)	46 SE Vilas (Lincoln - Van Buren)	
22 SW Lincoln (Jefferson - Adams)	47 NW West Lawn (Monroe - Leonard)	
23 SW Lincoln (Adams - Vilas)	48 NW West Lawn (Leonard - Edgewood)	
24 NE Van Buren (Madison - Jefferson)	49 NW West Lawn (Edgewood - Prospect)	
25 NE Van Buren (Jefferson - Adams)	50 SE West Lawn (Monroe - Leonard)	

Streets with restricted parking (1 or 2 hour)
Counts that were done on 4/9/2013
A College Lot along Woodrow
B College Lot in center of Campus
C College Parking Garage
D College Lot along Woodrow
E College Lot along Woodrow
F College Lot along Woodrow
G Siena Apartments
H College Lot along Jefferson
I High School Student Parking Lot
J High School Drop-Off/Pick-Up Area
K College and High School Staff Parking Lot
L High School Staff Parking Lot
M High School Staff Parking Lot
N Campus School Parking Lot

Appendix D: Explanation of Level of Service and Delay

Level of Service Conditions for Signalized Intersections

Level of Service	Definition	Delay per Vehicles (seconds)
A	Very short delay, with extremely favorable progression. Most vehicles arrive during the green phase and do not stop at all.	≤ 10.0
B	Good progression, with more vehicles stopping than for Level of Service A, causing higher levels of average delay.	> 10 and ≤ 20.0
C	Light congestion, with individual cycle failures beginning to appear. Number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.	> 20.0 and ≤ 35.0
D	Congestion is more noticeable, with longer delays resulting from a combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop and the proportion of vehicles not stopping declines.	> 35.0 and ≤ 55.0
E	Limit of acceptable delay, high delays result from poor progression, high cycle lengths, and high v/c ratios.	> 55.0 and ≤ 80.0
F	Unacceptable delay occurring, with oversaturation.	> 80.0

Source: *Highway Capacity Manual*, 2000.

Level of Service Conditions for Unsignalized Intersections

Level of Service	Average Total Delay (seconds/vehicle)
A	≤ 10.0
B	> 10.0 and ≤ 15.0
C	> 15.0 and ≤ 25.0
D	> 25.0 and ≤ 35.0
E	> 35.0 and ≤ 50.0

F

>50.0

Source: *Highway Capacity Manual*, 2000.

Appendix E

Intersection Analysis Reports

HCM 2010 TWSC
14: Monroe St & Driveway

3/14/2013

Intersection

Intersection Delay, s/veh 1.8

Movement	NWL	NWR	NET	NER	SWL	SWT
Vol, veh/h	0	100	750	100	100	610
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade, %	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	109	815	109	109	663
Number of Lanes	1	0	2	0	0	2

Major/Minor	Major 1		Major 2	
Conflicting Flow All	1419	462	0	0
Stage 1	870	-	-	-
Stage 2	549	-	-	-
Follow-up Headway	3.52	3.32	-	-
Pot Capacity-1 Maneuver	128	547	-	-
Stage 1	370	-	-	-
Stage 2	542	-	-	-
Time blocked-Platoon, %	0	0	-	-
Mov Capacity-1 Maneuver	98	547	-	-
Mov Capacity-2 Maneuver	98	-	-	-
Stage 1	370	-	-	-
Stage 2	415	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	13.2	0	2.4
HCM LOS	B	-	-

Minor Lane / Major Mvmt	NET	NER	NWLn1	SWL	SWT
Cap, veh/h	-	-	547	735	-
HCM Control Delay, s	-	-	13.2	10.746	1
HCM Lane V/C Ratio	-	-	0.20	0.15	-
HCM Lane LOS	-	-	B	B	A
HCM 95th-tile Q, veh	-	-	0.7	0.5	-

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

HCM 2010 TWSC
4: Monroe St & Edgewood Ave

3/14/2013

Intersection

Intersection Delay, s/veh 3.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Vol, veh/h	5	16	57	15	1	2	67	720	112	8	638	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		100	0		0	0		0
Median Width		0			0			0			0	
Grade, %		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	17	62	16	1	2	73	783	122	9	693	22
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow All	1260	1772	358	1362	1722	452	715	0	0	904	0	0
Stage 1	722	722	-	989	989	-	-	-	-	-	-	-
Stage 2	538	1050	-	373	733	-	-	-	-	-	-	-
Follow-up Headway	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Capacity-1 Maneuver	127	82	638	107	88	555	881	-	-	748	-	-
Stage 1	384	429	-	265	323	-	-	-	-	-	-	-
Stage 2	495	302	-	620	424	-	-	-	-	-	-	-
Time blocked-Platoon, %	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	107	67	638	67	71	555	881	-	-	748	-	-
Mov Capacity-2 Maneuver	107	67	-	67	71	-	-	-	-	-	-	-
Stage 1	318	420	-	220	268	-	-	-	-	-	-	-
Stage 2	407	250	-	526	416	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	33.7	68.9	1.3	0.2
HCM LOS	D	F	-	-





Minor Lane / Major Mvmt	NEL	NET	NER	NWLn1	NWLn2	SELn1	SWL	SWT	SWR
Cap, veh/h	881	-	-	70	555	208	748	-	-
HCM Control Delay, s	9.454	0.7	-	73.5	11.5	33.7	9.869	0.1	-
HCM Lane V/C Ratio	0.08	-	-	0.26	0.00	0.41	0.01	-	-
HCM Lane LOS	A	A	-	F	B	D	A	A	-
HCM 95th-tile Q, veh	0.3	-	-	0.9	0.0	1.8	0.0	-	-

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

HCM Signalized Intersection Capacity Analysis 5: Monroe St & Edgewood College Dr

3/14/2013

Movement	NWL	NWR	NET	NEP	SWL	SWT
Lane Configurations						
Volume (vph)	132	66	736	204	136	353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5			4.5
Lane Util. Factor	1.00	1.00	0.95			0.95
Frt	1.00	0.85	0.97			1.00
Flt Protected	0.95	1.00	1.00			0.99
Satd. Flow (prot)	1770	1583	3424			3491
Flt Permitted	0.95	1.00	1.00			0.57
Satd. Flow (perm)	1770	1583	3424			2016
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	143	72	800	222	148	384
RTOR Reduction (vph)	0	45	46	0	0	0
Lane Group Flow (vph)	143	27	976	0	0	532
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	16.0	16.0	17.0			17.0
Effective Green, g (s)	16.0	16.0	17.0			17.0
Actuated g/C Ratio	0.38	0.38	0.40			0.40
Clearance Time (s)	4.5	4.5	4.5			4.5
Vehicle Extension (s)	3.5	3.5	4.0			3.0
Lane Grp Cap (vph)	674	603	1385			816
v/s Ratio Prot	c0.08		c0.29			
v/s Ratio Perm		0.02				0.26
v/c Ratio	0.21	0.05	0.70			0.65
Uniform Delay, d1	8.8	8.2	10.4			10.1
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.7	0.1	1.8			1.9
Delay (s)	9.5	8.3	12.2			12.0
Level of Service	A	A	B			B
Approach Delay (s)	9.1		12.2			12.0
Approach LOS	A		B			B
Intersection Summary						
HCM 2000 Control Delay			11.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.53			
Actuated Cycle Length (s)			42.0		Sum of lost time (s)	13.0
Intersection Capacity Utilization			60.1%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

Intersection

Intersection Delay, s/veh 0.3

Movement	NWL	NWR	NET	NER	SWL	SWT
Vol, veh/h	5	10	1240	70	5	455
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade, %	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	11	1348	76	5	495
Number of Lanes	1	0	2	0	0	2

Major/Minor	Major 1		Major 2	
Conflicting Flow All	1644	712	0	0
Stage 1	1386	-	-	-
Stage 2	258	-	-	-
Follow-up Headway	3.52	3.32	-	-
Pot Capacity-1 Maneuver	90	375	-	-
Stage 1	197	-	-	-
Stage 2	761	-	-	-
Time blocked-Platoon, %	0	0	-	-
Mov Capacity-1 Maneuver	89	375	-	-
Mov Capacity-2 Maneuver	89	-	-	-
Stage 1	197	-	-	-
Stage 2	750	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	26.8	0	0.2
HCM LOS	D	-	-

Minor Lane / Major Mvmt	NET	NER	NWLn1	SWL	SWT
Cap, veh/h	-	-	181	474	-
HCM Control Delay, s	-	-	26.8	12.683	0.1
HCM Lane V/C Ratio	-	-	0.09	0.01	-
HCM Lane LOS	-	-	D	B	A
HCM 95th-tile Q, veh	-	-	0.3	0.0	-

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

HCM 2010 TWSC
14: Monroe St & Driveway

3/14/2013

Intersection

Intersection Delay, s/veh 1.9

Movement	NWL	NWR	NET	NER	SWL	SWT
Vol, veh/h	0	110	750	111	110	610
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade, %	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	120	815	121	120	663
Number of Lanes	1	0	2	0	0	2

Major/Minor	Major 1		Major 2	
Conflicting Flow All	1447	468	0	0
Stage 1	876	-	-	-
Stage 2	571	-	-	-
Follow-up Headway	3.52	3.32	-	-
Pot Capacity-1 Maneuver	122	542	-	-
Stage 1	368	-	-	-
Stage 2	529	-	-	-
Time blocked-Platoon, %	0	0	-	-
Mov Capacity-1 Maneuver	90	542	-	-
Mov Capacity-2 Maneuver	90	-	-	-
Stage 1	368	-	-	-
Stage 2	391	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	13.5	0	2.5
HCM LOS	B	-	-

Minor Lane / Major Mvmt	NET	NER	NWLn1	SWL	SWT
Cap, veh/h	-	-	542	727	-
HCM Control Delay, s	-	-	13.5	10.924	1
HCM Lane V/C Ratio	-	-	0.22	0.16	-
HCM Lane LOS	-	-	B	B	A
HCM 95th-tile Q, veh	-	-	0.8	0.6	-

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

HCM 2010 TWSC
4: Monroe St & Edgewood Ave

3/14/2013

Intersection

Intersection Delay, s/veh 3.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Vol, veh/h	5	17	57	16	2	3	67	720	118	9	638	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		100	0		0	0		0
Median Width		0			0			0			0	
Grade, %		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	18	62	17	2	3	73	783	128	10	693	22
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow All	1262	1781	358	1368	1727	455	715	0	0	911	0	0
Stage 1	724	724	-	992	992	-	-	-	-	-	-	-
Stage 2	538	1057	-	376	735	-	-	-	-	-	-	-
Follow-up Headway	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Capacity-1 Maneuver	127	81	638	106	88	552	881	-	-	743	-	-
Stage 1	383	429	-	264	322	-	-	-	-	-	-	-
Stage 2	495	300	-	617	424	-	-	-	-	-	-	-
Time blocked-Platoon, %	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	105	66	638	64	71	552	881	-	-	743	-	-
Mov Capacity-2 Maneuver	105	66	-	64	71	-	-	-	-	-	-	-
Stage 1	317	420	-	218	266	-	-	-	-	-	-	-
Stage 2	404	248	-	521	415	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	35.9	73	1.3	0.2
HCM LOS	E	F	-	-











Minor Lane / Major Mvmt	NEL	NET	NER	NWLn1	NWLn2	SELn1	SWL	SWT	SWR
Cap, veh/h	881	-	-	68	552	200	743	-	-
HCM Control Delay, s	9.454	0.7	-	79.5	11.5	35.9	9.91	0.1	-
HCM Lane V/C Ratio	0.08	-	-	0.30	0.00	0.43	0.01	-	-
HCM Lane LOS	A	A	-	F	B	E	A	A	-
HCM 95th-tile Q, veh	0.3	-	-	1.1	0.0	2.0	0.0	-	-

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

HCM Signalized Intersection Capacity Analysis 5: Monroe St & Edgewood College Dr

3/14/2013

						
Movement	NWL	NWP	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	145	73	736	225	150	353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5			4.5
Lane Util. Factor	1.00	1.00	0.95			0.95
Frt	1.00	0.85	0.96			1.00
Flt Protected	0.95	1.00	1.00			0.99
Satd. Flow (prot)	1770	1583	3415			3487
Flt Permitted	0.95	1.00	1.00			0.58
Satd. Flow (perm)	1770	1583	3415			2036
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	158	79	800	245	163	384
RTOR Reduction (vph)	0	49	52	0	0	0
Lane Group Flow (vph)	158	30	993	0	0	547
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	16.0	16.0	17.0			17.0
Effective Green, g (s)	16.0	16.0	17.0			17.0
Actuated g/C Ratio	0.38	0.38	0.40			0.40
Clearance Time (s)	4.5	4.5	4.5			4.5
Vehicle Extension (s)	3.5	3.5	4.0			3.0
Lane Grp Cap (vph)	674	603	1382			824
v/s Ratio Prot	c0.09		c0.29			
v/s Ratio Perm		0.02				0.27
v/c Ratio	0.23	0.05	0.72			0.92dl
Uniform Delay, d1	8.8	8.2	10.5			10.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.8	0.2	1.9			2.0
Delay (s)	9.7	8.4	12.4			12.2
Level of Service	A	A	B			B
Approach Delay (s)	9.2		12.4			12.2
Approach LOS	A		B			B
Intersection Summary						
HCM 2000 Control Delay			11.9		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.55			
Actuated Cycle Length (s)			42.0		Sum of lost time (s)	13.0
Intersection Capacity Utilization			61.2%		ICU Level of Service	B
Analysis Period (min)			15			
dl Defacto Left Lane. Recode with 1 though lane as a left lane.						
c Critical Lane Group						

Intersection

Intersection Delay, s/veh 0.3

Movement	NWL	NWR	NET	NER	SWL	SWT
Vol, veh/h	5	11	1240	76	6	455
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade, %	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	12	1348	83	7	495
Number of Lanes	1	0	2	0	0	2

Major/Minor	Major 1		Major 2	
Conflicting Flow All	1649	715	0	0
Stage 1	1389	-	-	-
Stage 2	260	-	-	-
Follow-up Headway	3.52	3.32	-	-
Pot Capacity-1 Maneuver	90	373	-	-
Stage 1	196	-	-	-
Stage 2	760	-	-	-
Time blocked-Platoon, %	0	0	-	-
Mov Capacity-1 Maneuver	88	373	-	-
Mov Capacity-2 Maneuver	88	-	-	-
Stage 1	196	-	-	-
Stage 2	745	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	26.5	0	0.3
HCM LOS	D	-	-












Minor Lane / Major Mvmt	NET	NER	NWLn1	SWL	SWT
Cap, veh/h	-	-	185	471	-
HCM Control Delay, s	-	-	26.5	12.751	0.1
HCM Lane V/C Ratio	-	-	0.09	0.01	-
HCM Lane LOS	-	-	D	B	A
HCM 95th-tile Q, veh	-	-	0.3	0.0	-

Notes

~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined

HCM Signalized Intersection Capacity Analysis 5: Monroe St & Edgewood College Dr

3/14/2013

						
Movement	NWL	NWR	NET	NEP	SWL	SWT
Lane Configurations						
Volume (vph)	145	73	736	225	150	353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.0	4.5
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.96		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3415		1770	3539
Flt Permitted	0.95	1.00	1.00		0.19	1.00
Satd. Flow (perm)	1770	1583	3415		345	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	158	79	800	245	163	384
RTOR Reduction (vph)	0	53	57	0	0	0
Lane Group Flow (vph)	158	26	988	0	163	384
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	16.1	16.1	17.1		24.7	24.2
Effective Green, g (s)	16.1	16.1	17.1		24.7	24.2
Actuated g/C Ratio	0.33	0.33	0.35		0.50	0.49
Clearance Time (s)	4.5	4.5	4.5		4.0	4.5
Vehicle Extension (s)	3.5	3.5	4.0		3.0	3.0
Lane Grp Cap (vph)	578	516	1184		262	1737
v/s Ratio Prot	c0.09		c0.29		c0.04	0.11
v/s Ratio Perm		0.02			0.27	
v/c Ratio	0.27	0.05	0.83		0.62	0.22
Uniform Delay, d1	12.3	11.4	14.8		16.2	7.2
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.2	0.2	5.4		4.5	0.1
Delay (s)	13.4	11.5	20.2		20.7	7.2
Level of Service	B	B	C		C	A
Approach Delay (s)	12.8		20.2			11.3
Approach LOS	B		C			B
Intersection Summary						
HCM 2000 Control Delay			16.6		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.58			
Actuated Cycle Length (s)			49.3		Sum of lost time (s)	13.0
Intersection Capacity Utilization			55.0%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

Appendix F

Edgewood High School – Parking and Transportation Management Plan

Edgewood High School is comprised of approximately 610 students, ninth through twelfth grade. We have 60 faculty and 43 staff. We have 261 total parking spots on campus. Edgewood High School is committed to partnering with the neighborhoods, Campus School and Edgewood College to minimize traffic coming to and from campus, daily. To reduce traffic the follow initiatives have been implemented for academic school year, 2013-14.

- **Bike, incentives for teachers and students. Free breakfast or lunch per quarter.**
- **Walker incentives for teachers and students. Free breakfast or lunch per quarter.**
- **Discounted bus tickets available to faculty, staff, and students.**
- **Staggered start and release times for our student body.**
- **Organized administrative management of student carpools from outskirt townships.**
- **Staggered release times from campus school.**
- **Reduced visitor parking to encourage family volunteer car pooling.**

Appendix G - EDGEWOOD SCHOOLS CAMPUS TRANSPORTATION PLAN ADDENDUM

Current College Procedures

- During the academic year the college limits events that take place on campus Monday-Thursday 7am-3pm. Limiting events ensures guests are not using parking spaces needed for faculty, staff and students.
- Any event taking place during a high volume class time is first approved through Transportation Services. Approval is based on campus parking needs and any other events taking place.
- The Deming Way Campus, located in Middleton, WI, is utilized as an auxiliary site, if we cannot accommodate the group on the main campus.
- Friday-Sunday and after 3pm during the week, we do not see high volumes of traffic, therefore event guests are welcomed to campus and parking is available.
- The need for parking is greatly reduced in the summer due to limited class offerings. Like many colleges and universities, Edgewood College offers event space and services for camps and conferences. These groups are provided with ample parking on campus. Groups who bus their participants to campus are instructed to drop off students in front of Regina Hall.
- All groups, including those using busses, are instructed to enter campus using the main Edgewood College Drive.
- Events staff work directly with Transportation Services to ensure spaces are blocked if necessary and appropriate signage is provided.
- The Woodrow gate will close 24/7 beginning the day after the College's Commencement and will open on the first day of school for whichever of the 3 Edgewood Schools opens earliest.
- Departments hosting large events are directed to provide specific instruction to guests to use the central drive when arriving to campus. Visitor parking is currently free to all guests.
- The three schools will take city events into account, such as Badger Football Saturdays, when planning events on each campus.

Potential Process Improvements

- Steps are being taken to add verbiage to campus maps directing all traffic down the central drive.
- Transportation Services has successfully worked with the city of Madison to find strategies to redirect traffic down the central drive on electronic mapping services such as Mapquest and Google Maps. This situation will be monitored to ensure future problems do not resurface.

Current Three School Communication

- If any of the three schools (Edgewood Campus School, Edgewood High School, Edgewood College) is planning a large event that will impact another school,

Appendix G - EDGEWOOD SCHOOLS CAMPUS TRANSPORTATION PLAN ADDENDUM

communication is sent from the event host school liaison to the impacted school liaison. Use of facilities is approved by the liaisons at each school. Liaisons for each school are listed below.

- Joyce Wodka, Campus School
 - Carol Anzelmo, High School
 - Samantha Tiller, Events Services Coordinator and Erin Bykowski, Assistant Director Transportation Services; Edgewood College.
- Requests are confirmed or denied based on the facility needs of each school
 - Clients are required to submit a minimum of two weeks' notice
 - Cancellation of events must be submitted no later than 72 hours in advance
- The communication chain prevents the schools from booking multiple large events on the same day and also allows the schools to utilize parking availability over the entire campus to its fullest potential.

Future Procedures with Growth

- The college will continue with the procedures outlined above with the addition of the following procedures to ensure successful management of parking and transportation needs with growth.
- When needed, the Three Schools will form a communications committee to regularly discuss event and transportation management.
 - The Communications Committee will include:
 - Samantha Tiller, Edgewood College, Events and Conferences Services Coordinator
 - Erin Bykowski, Edgewood College, Assistant Director Transportation Services
 - Carol Anzelmo, High School Support Staff
 - Joyce Wodka, Campus School Business Manager
 - Suann Saltzberg, Edgewood College, Assistant Director of Athletics
 - Any events that will directly affect the neighborhood will then be communicated via the neighborhood liaison to the neighborhood.
- Staff will continue to accommodate groups by continually seeking alternative parking and transportation arrangements.
- Events requiring the use of multiple busses will be scheduled around peak class times and/or will be parked at alternative locations such as our Campus Shuttle Program parking lots off campus.
- Groups requesting event space beyond capacity will be asked to use alternative transportation or will have their request declined.

A.3

STORMWATER MANAGEMENT PLAN

Edgewood Campus Master Plan Storm Water Management Concept Report

(Addendum to 1997 SWM Report)
Madison, Wisconsin



Prepared for
Edgewood Campus



Edgewood Campus Master Plan Storm Water Management Concept Report (Addendum to 1997 SWM Report)

Madison, Wisconsin

January 2014
Revised August 2015

Completed by:
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Conclusions.....	Page 5

EXHIBITS:

1. 1997 JJR Stormwater Master Plan
2. Existing & Proposed Master Plan with Drainage Basins
3. First half-inch infiltration standard exhibit

APPENDICES:

- A. WINSLAMM Summaries and Input Data

INTRODUCTION:

This stormwater management concept report for the proposed 2013 Campus Master Plan is an addendum to the 1997 JJR Stormwater Management Report (Exhibit #1). It incorporates changes to the campus since that time. The campus has a current impervious area surface ratio (ISR) of 38%.

Edgewood Campus is on the shores of Lake Wingra and is a part of the Lake Wingra watershed per the WisDNR's Surface Water Data Viewer. The general drainage pattern of the campus is to the southeast towards Lake Wingra. The campus is separated from the shore of Lake Wingra by the Park & Pleasure Drive. On the inland side of the drive there are a series of Native American burial sites and established trees that provide a buffer between the campus buildings, the drive and the shores of the lake. There is continual effort by the Edgewood Campus and the Dudgeon Monroe Neighborhood Association to improve water quality in the watershed and help clean up Lake Wingra.

Prior to beginning the research and analysis for this report, SAA Design Group walked the entire site with Professor Jim Lorman to determine the effectiveness of the existing stormwater measures. As of the time of this report, approximately 15,550 square feet of the campus is dedicated to stormwater management either through infiltration/bio-filtration systems or as a wet detention pond.

We understand that the existing wet detention basin, on campus has overflowed the basin several times since it was installed. The overflow was safely conveyed down the access drive by Predolin and DeRicci Halls and ultimately to Lake Wingra. It was also noted that during dry periods, the campus has to pump water into the wet basin in order to keep the fountain running. As stated in the 1997 JJR report, the outflow from the campus to the storm sewer in Woodrow Street is 28.1 cubic feet per second (cfs). Considering the basin has overflowed its banks, it can safely be assumed that the basin is operating at its design capacity as outlined in JJR's report.

What was most remarkable was the condition of the infiltration/rain garden areas on the campus. All of them appear to be functioning quite effectively and are a minimum of 3 years old. Most notable was the 5,000 square foot (sf) rain garden area just to the north of the campus school. Professor Lorman stated that when he, some students and area residents installed them, they had to use pick axes to break up the ground and install the plants. No engineered fill or underdrain system was used in the installation. There is a storm sewer pipe that was installed to drain this area that has a barrier put in it to block the direct flow of stormwater into the pipe and promote pooling and infiltrating of water into the rain garden. Professor Lorman stated that he has not seen the barrier overflow, water does not pond for excessively long periods of time and the plants in the rain garden are healthy and thriving.

STANDARDS:

The development as proposed for the campus can effectively be considered as a redevelopment project based on city standards. In almost each redevelopment area, existing impervious areas such as sidewalk, pavement and buildings must be removed in order to construct the new amenities. In addition, each new amenity does not cumulatively add more than 20,000 sf of impervious area at any one time. Over the span of this campus master plan, there will be a cumulative addition of approximately 127,000 sf of additional impervious area with the 17 proposed additions.

Erosion Control

Applicable erosion control requirements will apply to each construction site and will be detailed at the time of the preparation of the construction plans to limit total off-site permissible annual aggregate soil loss for exposed areas to an annual cumulative soil loss rate not to exceed 5.0 tons per acre per year.

Sediment Control

Because this site is in the Rock River TMDL, design stormwater management practices for development to retain soil particles greater than the 5-micron particle (80% reduction) on the site resulting from the 1 year, 24-hour storm event.

Run-off Rate Control

This site will be subject to run-off rate control per redevelopment standards. Once the cumulative addition of more than 20,000 sf of impervious has been constructed on the site, post development run-off rate control will be required. The stormwater management concept has been developed that will not only decrease peak run-off, but will infiltrate 91% of the stormwater increase from the total additional impervious area.

Outlets

All discharges from the proposed development must have stable outlets capable of carrying the 1, 2, & 10 and 100-year 24-hour proposed design flow at a non-erosive velocity.

Infiltration

Type "B" soils throughout the site indicates that infiltration is possible depending upon measured infiltration rates. Per the requirement, if existing infiltration rates do not exceed 0.5 in/hr, the site is exempt from the infiltration requirement. Traditionally, soils on this site have demonstrated an infiltration rate less than that required because of the compactibility of the soils. However, with the use of plantings to keep the soils "loose," infiltration has proven effective and will be utilized to the fullest extent to infiltrate as much additional runoff as feasibly practical. Even though the campus has a history of soils with less than a 0.5 in/hr infiltration rate, it is technically exempt from infiltration requirements, however through the above and beyond efforts of the campus, its staff and area residents, infiltration will still be expected and implemented to the maximum extent practicable.

Oil & Grease Control

Oil & grease control will be required on this site with the addition of any new parking or driveway area due to the fact there is already more than 40 existing, open surface parking stalls on the site.

Thermal Control

This site is exempt from thermal control requirements because it is not in the Sugar River Watershed.

STORMWATER MANAGEMENT CONCEPT:

Because of the layout of this site and the proposed additions, the majority of the buildings are downslope nearer the shores of Lake Wingra near the existing high quality trees and documented Native American burial sites. There is much more open space on the upland side of the site near the existing surface parking lots to address stormwater practices.

Acceptable, widely used stormwater practices for building additions generally place the stormwater feature (a rain garden) in close proximity to the new construction that will capture the clean roof run-off and filter/infiltrate it.

Because of the Master Plan process and in order to gain a maximum in stormwater treatment effectiveness, this site lends itself to a more aggressive approach to stormwater management.

Instead of following current practices for placement of stormwater management facilities, the concept will be to take an equivalent area that would be required for the building additions and place it elsewhere on the site to maximize collection, treatment and infiltration. Roof run-off which is considered clean water will be connected to existing storm sewer where feasible and allowed to drain directly to the lake while an equivalent (or greater) amount of dirtier surface run-off will be collected, treated and infiltrated in a non-related area of the site. (*Upland Concept*)

Per the attached Exhibit #2, the Master Plan has been annotated with potential *upland* rain garden infiltration areas that will compensate for the majority of the building additions in the downslope areas of the site.

Another added benefit to incorporating this type of stormwater management concept into the master planning process is that the Campus has advance knowledge of the locations of the potential rain gardens and can implement them prior to any construction occurring through the use of student and neighborhood projects: *This will allow them to have the areas online and functioning prior to the requirement as it is triggered by construction.*

For planning purposes only, determining the equivalent amount of stormwater management areas was performed by utilizing "The First Half-Inch Infiltration Standard" as authored by the Waukesha County Land Conservation Department (Exhibit #3). This general rule of thumb is an excellent tool to plan for future stormwater needs. Detailed calculations however will be required for each impervious addition to the site and a running tally will need to be kept to ensure storm water requirements are being met over the entire campus.

WINSLAMM 9.4.0 was used to determine generic, anticipated, water quality treatment rates and infiltration volumes.

POTENTIAL RESULTS:

The following table summarizes the proposed amount of impervious area that is to be added to the site as well as the amount of existing impervious area that is to be removed as a result of the construction activities:

Campus Master Plan				
Addition	Description	Proposed Impervious Area (sf)	Removed Impervious Area (sf)	Required Infiltration Area (sf)
1	Future Facility & Structured Parking	55,000	48,184	2,292
2	DeRecci Hall Expansion	5,500	740	229
3	Library Expansion	6,700	0	279
4	Chapel Expansion	5,300	740	221
5	Regina Hall Western Expansion	4,000	980	167
6	Dining Expansion	6,000	4,120	250
7	Regina Hall Eastern Expansion	19,727	9,922	822
8	Edgedome Expansion	22,500	15,444	938
9	Sonderegger Expansion	9,100	700	379
10	Campus School Expansion	26,000	6,000	1,083
11	High School Southern Expansion	3,400	1,380	142
12	High School Eastern Expansion	10,300	3,740	429
13	Siena Hall Replacement	19,400	4,400	808
14	New Non-residential Building	14,000	0	583
15	Marshall Hall Expansion	9,600	10,390	400
16	New Non-Residential Building	9,300	0	388
17	Additional Parking (30)	7,900	0	329
-	Total Proposed Impervious Area =	233,727	sf 106,740	9,739
	Cumulative Total Additional Impervious Area =	126,987	sf	
	Maximum build-out ISR =	43%		

The following table summarizes the existing and proposed storm water management areas for the campus: (Volumes are calculated using a minimum 1-foot depth of storage)

Proposed Storage req'd by "first 1/2" method" =	9,739	cf	
Existing amount of site dedicated to SWM =	15,550	sf	
Existing stormwater features to be removed =	2,290	sf	
Ultimate Total Site Area dedicated to SWM =	22,589	cf	
*Total Site Area =	2,121,210	sf	
Total area for SWM as a % of site =	1.06%		

*Excludes area between south property line and Park & Pleasure Drive.

The following table summarizes the results of implementing the proposed stormwater management concept in comparison to standard the standard concept:

1981 Rainfall total between 3/12 - 12/2 =	28.81	in
*Yearly rainfall volume on 223,900 sf of new impervious areas =	537,547	cf
*Yearly volume stored & infiltrated with standard practice =	339,638	cf
*Yearly volume stored & infiltrated upland concept=	490,907	cf
Upland Concept Percent greater effectiveness =	45%	
<i>*Based upon required storage volume of 9,329 cf</i>		

The following *table summarizes the comparison of the effectiveness of treatment with the upland concept vs standard practice:

	Standard Practice	Upland Concept
Particulate Solids	82.62 lbs	853.8 lbs
Phosphorous	0.22 mg/L	0.89 mg/L
Ammonium Nitrates	1.53 mg/L	4.21 mg/L
Lead	0.05 lbs	0.18 lbs

*WINSLAMM 9.4.0 (see appendix #1)

As referenced by the table above, using the upland concept method there is the potential to treat stormwater run-off over standard practice:

10 times more particulate solids
 4 times more phosphorous
 3 times more ammonium nitrates
 3.5 times more lead

CONCLUSION:

Even though the Edgewood campus will be providing the same area/volume required, using the upland concept, it is possible to greatly exceed the requirements. The added benefit of having rain garden areas not being directly connected to each individual construction will give the campus the opportunity to educate students, involve area residents and proactively approach the stormwater plan to achieve the overall goal of using the minimum storm water requirements as a starting point and not a goal and surpass expectations.

Details and calculations will be created for each individual rain garden construction at the time of actual installation and documented in a "running table" carried forward in each storm water management report to provide easy reference to the Edgewood Campuses dedication to effective storm water management on the site.

Campus Storm Water Summary Table																			
Date of Add.	Description	Impervious Area		Infiltration				Total Suspended Solids (TSS)				Peak Flow (cfs)							
		Built (sf)	Removed (sf)	Area Req'd (sf)	Area actual (sf)	Vol-req'd (cf)	Vol-actual (cf)	Existing (lbs)	Proposed (lbs)	Removal - req'd (lbs)	Removal - actual (lbs)	1-yr (req'd)	1-yr (act)	2-yr (req'd)	2-yr (act)	10-yr (req'd)	10-yr (act)	100-yr (req'd)	100-yr (act)
Apr-15	Regina Hall Eastern Expansion	21,742	9,982	906	450	490	1,491	357	125	286	297	0.47	0.33	0.69	0.46	1.51	1.21	2.82	2.64
Aug-15	High School Track	164,519	52,986	4,194	11,265	4,647	11,265	822	2,285	1,171	1,780	3.40	3.08	4.29	3.63	7.65	5.87	14.93	12.80
Sep-15	Additional High School Parking	21,268	211	886	5,200	877	21,912	47	301	203	2,416	6.41	2.16	8.53	5.33	17.02	11.20	36.51	32.52
Net Add =		144,350		Net Add =	10,929		Net Add =	28,653		Net Add =	2,833	Net =	4.71	Net =	4.09	Net =	7.90	Net =	6.30
0,000 = Exceeding Requirements (0,000) = NOT Exceeding Requirements																			

0,000 = Exceeding Requirements

(0,000) = NOT Exceeding Requirements

EXHIBIT #1

Technical Appendix D: Stormwater Management Plan

Submitted to
City of Madison
Department of Planning and Development
215 Martin Luther King, Jr. Boulevard
Madison, Wisconsin
53701

Prepared for:
Edgewood, Inc.
Monroe Street
Madison, Wisconsin
53705

Prepared by:
JJR Incorporated
One North Pinckney Street
Madison, Wisconsin
53703

16 April 1997

Stormwater Management Plan

Submitted to
City of Madison
Department of Planning and Development
215 Martin Luther King, Jr. Boulevard
Madison, Wisconsin
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16 April 1997

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Appendix A	Table 1 - Edgewood Campus Drainage Areas Table 2 - Peak Discharge at Basin Outlets Attachment 1 - City of Madison Detention Requirement Calculations
Appendix B	Drawing 17800-A1 - Site Location Drawing 17800-A2 - Detention/Treatment Cell Alternative Locations Edgewood Campus Plan Drawing 17800-B3 - Site Topographic Map Drawing 17800-B4 - Existing Drainage Basins Drawing 17800-B5 - Proposed Stormwater Drainage Plan
Appendix C	West Campus Proposed - 4.2 in., 10-Year Storm West Campus Proposed - 6.0 in., 100-Year Storm Central Campus Proposed - 4.2 in., 10-Year Storm Central Campus Proposed - 6.0 in., 100-Year Storm

1. Executive Summary

The stormwater management system on the Edgewood campus has been designed to safely convey stormwater runoff to Lake Wingra for storms up to the 100-Year storm. The drainage system from the West Campus basin includes three dry detention basins and one wet detention basin, and a concrete pipe conveyance system. The Central Drainage basin includes one dry detention basin and a conveyance system that uses both a grass swale and concrete pipe.

A new 36-inch concrete pipe storm sewer will be located along the east side of the Woodrow Street right-of-way, and extend from DeRicci Hall to the lake. This pipe will divert all stormwater from storms smaller than a 10-Year event away from the existing City storm sewer system and directly into Lake Wingra. It will convey the majority of the runoff from all storms to the lake, greatly reducing the potential for flooding in the adjacent residential neighborhood. Detention storage is in excess of the 10-Year volume requirements per City of Madison ordinance. The City ordinance requires, for this site, 1.5 acre-feet of storage, and there is 2.3 acre-feet of storage on site.

The first phase of construction, which will get underway in the summer of 1997, includes:

- A series of detention ponds, a new storm sewer system, and a storm sewer along Woodrow Street in the West Drainage Basin to prevent the 10-year peak flow from increasing beyond 28 cfs in the City storm sewer system.
- An increase in the conveyance capacity of the grass swale in the Central Drainage Corridor.
- Replacing the existing storm sewer pipe that drains the Campus Grade School playground to decrease the flooding that occurs in this area.
- Implementing the structural and non-structural best management practices described in this report to help improve the water quality of the runoff entering Lake Wingra.

Edgewood, Inc. is committed to implementing the stormwater management plan outlined in this report.

Edgewood Campus Stormwater Management Plan

2. Introduction

2.1. Purpose and Scope of Report

This report presents the overall stormwater management plan for the Edgewood campus. The plan was prepared by JJR, Incorporated for Edgewood, Inc., comprised of Edgewood College, Edgewood High School, and Edgewood Campus Grade School. The Stormwater Management Plan has been developed to be consistent with the City of Madison stormwater ordinance and the current draft of the updated Edgewood Campus Plan. The proposed stormwater management site improvements will be designed to work with the natural topographic and vegetative features of the site. It is the objective of this plan to blend all stormwater elements with the existing and proposed campus features in such a way that it appears as if the new drainage patterns have always been there. Not only will the plan minimize negative environmental and aesthetic impacts; it is designed to enhance the historic beauty of this site as well as provide educational opportunities for the grade school, high school, and college students.

This report and the accompanying drawings provide details of the following:

- Existing site conditions and stormwater runoff routing
- The proposed stormwater conveyance system
- Appropriate stormwater quality best management practices.

The report is organized to provide a level of detail sufficient to allow City personnel to verify compliance with City ordinance requirements. The existing conditions, including an analysis of the stormwater drainage system, are discussed in this section. The second section presents the proposed stormwater management plan for each drainage basin. The final section examines the water quality benefits of the proposed plan and reviews the applicable best management practices for the site. Detailed construction plans and specifications for the implementation of the systems described in this report will be prepared in preparation for construction in the summer of 1997. The tables and detention storage requirements described in this report are in Appendix A and the drawings are in Appendix B. Appendix C contains the complete model input and output for the 10-Year storm and the 100-Year storm for the proposed plan.

2.2. Description of Existing Water Resources

The location of the Edgewood Campus is illustrated on the attached Site Location Map (Drawing 17800-A1). The 55 acre campus is bordered by Lake Wingra on the South, Woodrow Street on the west, Monroe Street on the north and Edgewood Avenue on the East. There are six drainage basins on the Edgewood Campus. They are listed below and illustrated on Drawing 17800-B4. A summary of the areas that includes the amount of impervious area in each drainage basin is listed in Table 1.

1. West Campus Drainage Basin
2. Central Drainage Corridor
3. East Campus Drainage Basin
4. South Campus Drainage Basin
5. North Isolated Basin
6. Lake Wingra Environmental Corridor

The West Campus Drainage Basin includes the area in front of the high school, the track and field areas, the college parking area, DeRicci Hall, and Woodrow Street. Runoff from this area enters the City of Madison storm sewer system through a set of four storm sewer inlets at the low point on Woodrow Street. The majority of this 25.2 acre basin is pervious. The major impervious structures are the high school and college parking lots, and DeRicci Hall. The total impervious area of this basin is 6.4 acres, or 25 percent of the total area.

The 7.1 acre Central Drainage Corridor includes the high school buildings, the grade school playground, much of the Edgedome and the grass area between the Edgedome and Lake Wingra. It is a relatively small area with high peak flows because of the steep slopes and proportionally higher amount of impervious areas. Runoff from this area discharges directly to Lake Wingra through a stone arch culvert beneath Edgewood Drive near the Mazzuchelli Biological Station. During moderate and larger rainfall events, water backs up at the storm sewer inlet at the base of the grade school playground due to both vegetation that regularly obstructs the inlet and to inadequate conveyance capacity. The total impervious area of this basin is 3.4 acres, or 48 percent of the total area.

The 9.6 acre East Campus Drainage Basin discharges stormwater primarily by sheet flow to Lake Wingra. The slopes are relatively steep and flow directly to Lake Wingra. The majority of the site is pervious; the major impervious structures are the Campus Grade School, its parking lot, and the Siena apartment building and its parking lot. The total impervious area of this basin is 2.1 acres, or 22 percent of the total area.

The South Campus Drainage Basin includes the College Library, the Chapel, Regina Hall, and Reges Hall, and the wooded areas that border Edgewood Drive. The 5.6 acre area discharges directly into Lake Wingra through either sheet flow or direct discharge from a storm sewer pipe beneath Edgewood Drive. Detention requirements for the two most recently constructed buildings, the Library and Reges Hall, were obtained by either rooftop storage (Library) or by purchasing a variance fee from the City of Madison to waive the detention requirements. The total impervious area of this basin is 1.1 acres, or 20 percent of the total area.

The North Drainage Basin is a 4.7 acre isolated drainage basin. The surface runoff flows by overland flow, to the centrally located low spot, where it slowly infiltrates or evaporates. Most of the basin is pervious. The only impervious area that contributes runoff to this area is a small section of the parking lot next to the high school, which totals 0.8 acres, or 17 percent of the total area.

The Lake Wingra Environmental Corridor includes the land between Edgewood Drive and Lake Wingra, which drains directly to Lake Wingra via sheet flow. Consequently, this area was not included in this stormwater management master plan as a drainage basin. The installation of detention/treatment cells for

Edgewood Campus Stormwater Management Plan

7 April 1997

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West Campus and Central Drainage Corridor runoff is being proposed for study by Dr. James Lorman of Edgewood College as part of a stormwater management demonstration and research project.

2.3. City of Madison Ordinance Requirements

The City of Madison Engineering Division has indicated that it will require detention storage only for structures built after December 1, 1995, due to previous agreements between the City and the Edgewood Campus. However, the City has put two conditions on stormwater management at Edgewood. They are:

1. Allowable peak flows at the Woodrow Street storm sewer inlet. The City has no records of flooding occurring around the storm sewer manholes at the low point on Woodrow Street. However, the City indicated that the peak flow entering the storm sewer pipe from a 10-year design storm (4.2 inches) may not exceed the capacity of the pipe as determined by Manning's equation under full flow conditions (28.1 cfs). The City will not accept a variance fee in lieu of detention for discharges entering this pipe.
2. Detention requirements. The City indicated that the volume of detention storage on site must be able to retain the difference between the existing and proposed peak flows for the 10-Year storm.

3. Edgewood Campus Stormwater Management Plan

3.1. Introduction

JJR has prepared a drainage plan for the West Campus drainage area, the Central Drainage Corridor, the East Basin, and the South Basin. The West Campus area drainage plan is designed to accommodate the most impervious conditions that will exist as construction in this drainage area proceeds over time. The drainage plans for the East Basin and the South Basin are conceptual plans that locate potential detention storage sites for use as future development occurs.

New storm sewer work was undertaken for the High School in 1995 during the construction of the High School Auxiliary Gymnasium, in the Central Drainage Corridor. However, drainage problems that continue to exist around the Campus Grade School must be addressed. The plan for this area includes the reconstruction of the storm sewer inlet and pipe system that drain the low areas near the Campus Grade School playground area. This work will include regrading the swale around the existing playground area (the proposed parking and drop-off circle) to increase its carrying capacity, and other minor earthwork to improve overall site drainage.

3.2. The Stormwater Model

The site hydrology was developed using the Soil Conservation Service TR-55 methodology, per City of Madison design requirements. The HydroCad stormwater modeling system, developed by Applied Microcomputer Systems, was used to calculate the hydrographs and perform the stormwater routing for the site.

The model requires land use, topography, stormwater feature, soil type, and aerial data to generate and route stormwater runoff. The existing land use data and stormwater conveyance system model was developed from a composite of campus topographic maps prepared primarily by D'Onofrio-Kottke, and from additional survey data that was collected by JJR. Drawing 17800-B3 is a reduced version (1" = 200') of the topographic maps used in this study. Additional site and drainage information was obtained from discussions with Edgewood personnel.

Each drainage basin is divided into sub-basins. The peak flows from each sub-basin are estimated using the TR-55 procedures found in HydroCad. The time of concentration for each sub-basin is generally estimated using a combination of sheet flow and shallow concentrated flow methods. The complete model input and output for the 10-Year and the 100-Year storm for each drainage basin is included in Appendix C. Table 2 lists the peak discharges for all relevant storms for the West Campus and Central Drainage Corridor.

The Stormwater Management Plan base maps were developed from the current draft of the updated Edgewood Campus Master Plan prepared by Potter Lawson Architects and JJR. The upland soils types were evaluated from the Soil Survey of Dane County, Wisconsin, published by the Soil Conservation Service. The five different soil types located on the upland areas of the Edgewood Campus were all classified as "B" type soils. These pervious areas were evaluated in the model as open space, grassed areas in good condition, and assigned a curve number of 61. All impervious areas were assigned a curve number of 98.

3.3. West Campus Drainage Basin

The Edgewood Campus Master Plan describes the following changes to this drainage basin:

- A substantial increase in the size of the high school commons parking lot.
- A new Fine Arts Center with underground parking.
- Doubling the size of the College parking lot.
- A new shared Science Facility, with adjacent underground parking.
- A new entrance road, with a pond in the center of the turn-around.
- A new 400 meter running track with soccer/football field and underdrain system.
- Humanities Center addition on DeRicci Hall.
- The construction of a central College Quadrangle.
- A new classroom building connected to the High School, with additional parking.

Each of these structures, except for the College Quadrangle, will increase the stormwater runoff volume and peak flows that enter the Woodrow Street stormwater drainage system. The drainage plan to convey runoff from these areas models the most conservative construction sequence - it assumes all High School parking has been constructed but does not assume that the Quadrangle, with its increase in pervious area, has been constructed. Based upon these assumptions, the maximum impervious area is 12.4 acres. The likely construction phasing will include more high school parking, if warranted by High School enrollment levels, at the same time the Quadrangle is constructed. Detention storage for the Shared Science Facility and parking garage, as well as other nearby impervious areas, is included in the pond. The replacement of the College parking lot by the Fine Arts Center and parking garage should result in no net impervious area change. Once all construction is complete, 41% (12.1 acres) of the basin will be covered with impervious surfaces (see Table 1).

Flows from storms that exceed the storage capacity of the proposed detention structures will be conveyed either by storm sewer or by street to the Woodrow Street storm sewer. A new storm sewer pipe will be constructed from this storm sewer south along Woodrow Street. It will discharge to the wetland bordering Lake Wingra. This new pipe will convey the majority of the runoff from all storms, including the 100-Year storm, directly to Lake Wingra. It will redirect runoff from all but the largest storms away from the existing City of Madison storm sewer system, and will significantly reduce the potential for flooding due to large storms at the base of Woodrow Street.

The storm sewer plan, which is illustrated in Drawing 17800-B5, employs four detention ponds to decrease the peak runoff flows from this basin. The upland drainage system has two detention ponds. These ponds will retain runoff generated from the northern basin and the lawn areas on the east side of the High School main entrance road. Runoff from these ponds discharges to a storm sewer beneath the High School parking lot, and then to a storm-sewer that is parallel to the main access road. This pipe flows into a third pond located northwest of the proposed parking structure. This runoff discharges into the wet detention pond located inside the new turning circle.

This fourth pond is integrated into the turning circle at the terminus of Center Drive (the main campus entry road). This permanent pool will be lined with clay to minimize infiltration, and will have a water supply source to maintain water levels during an extended dry period. Discharge from the pond will be regulated by an orifice and an overflow weir. The permanent pool elevation for the pond will be established at 32.3'. Both outflow devices will discharge into the new storm sewer that discharges south to Lake Wingra. A floating fountain will help to aerate the pond.

Runoff from the isolated northern basin is routed to the existing depression (pond 6) located in the center of the wooded area. However, because of the potential for increase flooding due to the additional impervious surfaces of the new building and parking, this runoff will be discharged into the West Campus Drainage Basin. Runoff from this area will be routed via surface flow to pond 9, a detention basin that will be located in what is now the upgradient, or eastern, side of the entrance road for the high school. The

discharge from this pond, along with runoff from the High School Parking Lot, is directed by a storm sewer (reach 2) that is parallel to the main campus access drive to pond 7. This runoff eventually flows into the Woodrow Street storm sewer system via the wet detention pond 2 in the turning circle. Runoff from Woodrow Street is also included in this model to more accurately determine the peak flow rates that enter to the Woodrow Street storm sewer.

The peak flows for the one-, two-, five-, ten-, and one hundred-year rainfall events for this alternative are listed in Table 2. Although the peak flow for the system has increased, either all or the majority of the runoff will bypass the existing City storm sewer system that begins at the base of Woodrow Street. This will significantly decrease stormwater flows through the existing City storm sewer system for all storms. For example, the existing peak flow through the City system of 28.7 cfs for the 10-Year storm has been decreased to 5.6 cfs through the City system due to the addition of the new 36-inch storm sewer bypass along Woodrow Street. This compares favorably to both the discharge due to existing conditions and to the maximum allowable peak discharge of 28.1 cfs permitted by the City into the Woodrow Street storm sewers. This proposed bypass pipe decreases the discharge from a 100-Year storm into the existing City of Madison system from 53.1 cfs to 28.3 cfs.

JJR is also working, with Dr. James Lorman, a Professor of Biology at Edgewood College, on the design of a demonstration project using stormwater detention/treatment cells located downgradient of the Woodrow Street storm sewer outfall. These cells would test the effectiveness of using plant and aquatic communities to remove stormwater contaminants before they enter Lake Wingra. There is additional discussion of these systems in Section 4.

3.4. Central Drainage Corridor

Two major changes are proposed for the Central Drainage Corridor, which drains the back of the High School and the High School rooftops as well as the Campus Grade School playground. The Campus School parking will be relocated to the area currently occupied by the playground, and the current Grade School parking will be replaced with a smaller paved basketball court area. A small residence hall addition is also planned as the campus develops. The impact of these changes on stormwater management will be a slight increase in the amount of impervious area draining through the existing storm sewer system. There are also two significant existing problems due to stormwater runoff that must be addressed. These problems are:

- Flooding in the existing playground area.
- The potential for runoff to sheet flow into the Campus Grade School building entrances.

The major drainage problem in the Central Drainage Corridor is flooding that occurs regularly in the low lying playground area between the grade school and the high school. This flooding is due to a combination of factors:

- Insufficient conveyance capacity of the 15-inch storm sewer pipe that drains the playground.
- The increased flows due to the recent Auxiliary Gym and parking construction.
- A poorly designed inlet grate that regularly becomes obstructed with leaves, branches, and wood chips.
- The undersized grass swale running around the open play area from the high school roof top runoff discharge manhole to the 15-inch storm sewer pipe.

Edgewood, Inc. will take the following actions to minimize the flooding in the playground area:

1. Increase the conveyance capacity of the storm sewer system by replacing the badly deteriorated 15-inch pipe, with new, more hydraulically efficient, reinforced concrete pipe. The change should also accommodate the proposed parking lot in the Campus School playground area. Redesign the inlet grate to minimize the potential for flow obstruction caused by debris. The steam pipe connecting the grade school to the Edgedome is four feet beneath the existing storm sewer pipe. The construction of the new storm sewer will be designed to accommodate the steam pipe.
2. Remove debris from around the inlet grate on a weekly basis as part of the regular building maintenance.
3. Improve the conveyance capacity of the swale by building up the sides, at a 5:1 (H:V) or milder slope, to about 18 inches above the invert of the swale. Construct a box culvert beneath the new access road that crosses the flow path of the swale.
4. Redirect the balance of the runoff from two small buildings at the upper end of the Central Drainage Corridor to the Eastern Drainage Basin. These two buildings are the pre-school and Marshall Hall. The runoff, which should be directed from these buildings as sheet flow, will have little hydrologic impact on the Eastern Drainage Basin because of the long expanse of grassed surface it must flow across before crossing Edgewood Drive.

Actions one through three will have the effect of increasing the peak flows at the pipe outfall that directs runoff through the arch culvert beneath Edgewood Drive. Therefore, this conveyance channel will need to be protected by pipe, riprap or a geosynthetic channel liner. JJR is also working, with Dr. Lorman, on the design of a proposed demonstration project using stormwater detention/treatment cells located downgradient of the arch culvert. These cells would both detain stormwater for flow control and use plant and aquatic communities to remove stormwater contaminants before they enter Lake Wingra. Hydraulically, these cells would be designed to capture and treat the runoff from small storms; the peak flows from larger storms would bypass the cells and flow directly to the wetland along Lake Wingra, just as storms currently do with the existing conveyance system. The two alternative proposed locations for these cells are illustrated on Drawing 17800-A2. There is additional discussion of these systems in Section 4.

The potential flooding problems related to the grade school playground and sheet flow into the north entrance of the grade school building will be resolved using diversion berms, swales, or culverts to redirect the sheet flow upland of these areas.

Runoff from the high school parking lot and rooftop is routed by storm sewer to an outlet manhole located upgradient of the grade school by storm sewer. The playground outlet pipe is modeled as a culvert from the detention pond (Pond 1) that represents the storage available at the base of the playground. The culvert was modeled as the pond outlet device because the model applies contraction coefficients that more accurately reflect the proposed discharge outlet configuration.

The peak flows for the one-, two-, five-, ten-, and one hundred-year rainfall events for this alternative are listed in Table 2. The peak flow of 15.6 cfs for the 10-Year storm is greater than the existing peak flow due to the increased conveyance capacity of the new storm sewer pipe.

3.5. East Campus Drainage Basin

Stormwater management requirements in the east campus due to the proposed construction in this area, as outlined in the Edgewood Campus Master Plan, will be stored using a surface detention pond in the area designated on Drawing 17800-B5. The additional construction anticipated to take place in the basin includes future residence halls, parking, and an addition to the Campus Grade School. In addition, rooftop

runoff from the pre-school center, and the balance of the runoff from Marshall Hall, both of which are located at the upland edge of the drainage basin, will be diverted from the Central Drainage Corridor as sheet flow into this basin. The existing Campus Grade School parking area will be replaced by a smaller paved basket ball court. This runoff will continue to sheet flow towards Lake Wingra. No analysis of the specific storage requirements for the East Campus Drainage Basin has been developed for this plan because buildings and parking lots have not been designed for these areas. However, the topography is suitable for using both sheet flow and grass swales in the drainage system design.

3.6. South Campus Basin

Stormwater management requirements in the south campus basin have been met by constructing rooftop detention storage for the new Library, and by purchasing a variance from detention requirements for Reges Hall. Stormwater due to the additional construction in this area, as outlined in the Edgewood Campus Plan, will be temporarily stored using a surface detention pond in the area designated on Drawing 17800-B5.

3.7. North Isolated Basin

The North Isolated Basin will receive additional runoff due to the construction of the proposed high school classroom addition as well as additional parking near the high school. This increase in runoff volume will increase the frequency and duration of any ponding that occurs at the low point in this isolated basin.

The solution to this problem is to direct the runoff from the additional impervious areas north into the isolated basin using a level spreader swale. The level spreader will uniformly distribute the runoff to the upslope area of the basin, allowing it to sheet flow over the pervious grass slope. This will increase infiltration and the travel time of the runoff, and so decrease the peak flow from the new structures. A broad, shallow grass swale will be constructed to act as the emergency overflow structure that will limit the allowable water elevation in the basin.

3.8. Detention Storage Requirements

The City of Madison stormwater ordinance requires that the volume of detention storage on site must be able to retain the difference between the existing and the proposed peak flows for the 10-Year storm. The TR-55 analysis for storage volume for detention basins was used to determine the required volume. The curve number used in the analysis is the composite curve number for both the West Campus and the Central Campus drainage basins. Existing and proposed peak flows were calculated from the sum of the peak flow totals for the 10-year event from each of the drainage basins. The analysis indicated that the required detention basin storage volume should be 1.5 acre-feet. The total detention storage volume for the Edgewood Campus is 2.3 acre feet, which exceeds the required detention storage volume by 0.8 acre-feet. The data and model output for this analysis is included in Appendix A.

4. Water Quality Management Plan

4.1. Introduction

Stormwater runoff from an institutional land use area such as the Edgewood Campus primarily contains pollutants such as suspended solids, fertilizers and pesticides, organic debris, and automobile-related pollutants such as oil and grease, lead, and arsenic. Though it is generally physically possible to remove these pollutants from stormwater runoff, retro-fitted treatment solutions for stormwater runoff are generally cost-prohibitive. However, a number of stormwater best management practices (BMP's) can be tailored for the site conditions found on the Edgewood Campus.

These BMP's include both non-structural and structural practices. The non-structural practices include:

- Routing rooftop runoff to pervious surfaces. This practice has the multiple benefit of decreasing runoff volume through infiltration, as well as filtering pollutants from runoff as it flows through the grass and infiltrates into the soil.
- Cleaning and Maintenance. Stormwater BMP's generally must be cleaned on a regular basis for them to function correctly. Cleaning and maintenance would include:
 - Cleaning catchbasins and filter strips on a regular basis.
 - Removing leaves in the fall before they enter the drainage system and Lake Wingra.
 - Sweeping the streets on campus, particularly during early spring, to remove sand and other debris deposited during the winter.
- Minimizing the application of fertilizers and herbicides. Train maintenance workers to apply fertilizers at plant uptake rates, and only at optimum times, to minimize the amount of excess material that enters the drainage system.

The structural practices include:

- Catchbasins, with sumps, located at storm runoff inlets, to trap large particles in runoff.
- Grass swales that will both infiltrate and filter stormwater runoff.
- A detention pond located in the turning circle along Center Drive.
- A large catchbasin located at the base of Woodrow Street to trap large particulates in the runoff prior to discharge to Lake Wingra. It would be the responsibility of the City of Madison to maintain the catchbasins in the public right-of-way along Woodrow Street.
- Using the wetland at the new storm sewer outfall as a final polishing filter for stormwater before it enters Lake Wingra.

The educational resources available through the Edgewood College Natural Sciences Department will be used to assist with the design and will be called upon in the future to monitor a series of long term nonpoint source demonstration projects. JJR has been working with Dr. James Lorman from the College, Mr. Joe Zaiman from the High School, and Mrs. Linda Janousek from the Campus Grade School to develop the demonstration projects, as well as the other best management practices, which are listed below for each drainage basin on campus. These projects, if selected, would be integrated into the curriculum to provide conceptual design assistance and long term monitoring and maintenance.

Dr. Lorman has identified a number of potential funding sources and is in the process of preparing grant proposals for the demonstration projects. These sources include:

- DNR Lake Management Planning Grant
- DNR Lake Management Protection Grant
- Yahara/Monona Priority Watershed Project
- NSF Academic Research Infrastructure Facilities Grant Program
- Environmental Protection Agency
- USGS (contribution of time and skills for water quality measurement studies)

4.2. Central Drainage Corridor

In addition to employing the same nonstructural best management practices used in the West Campus, a grass swale between the Campus School and the High School will be modified to increase its conveyance capacity. In addition, detention/treatment cells may be constructed along the downgradient side of Edgewood Drive. The existing grass swale, which will be modified during construction between the high school manhole outfall and the grade school playground inlet, will improve water quality by increasing the infiltration and filtering capacity of the conveyance system. It will also help decrease the peak flows from the high school.

Edgewood College is also applying for funding to design, construct, and maintain detention/treatment cells located at the existing Central Drainage Corridor outfalls. These detention/treatment cells will be designed as small detention ponds that will receive runoff from the entire corridor. They would be constructed on the downgradient side of Edgewood Drive, either as a series of long, narrow cells parallel to the drive, or as a cluster near the Mazzuchelli Biological Station. Some runoff from these cells may be diverted to the "living machines" in the biological station. The cells would be planted with selected species of vegetation that are intended to remove pollutants such as salt, nitrogen, phosphorus, oil and grease, and particulates from stormwater. The biological station instructors and students would maintain and monitor the long term pollutant removal rates of the detention cell system. Detention cell alternative locations are illustrated on Drawing 17800-A2. The construction of these cells is contingent upon available funding primarily from sources other than Edgewood, Inc.

4.3. West Campus and North Isolated Drainage Basin

The West Campus Drainage Basin, which also includes the North Isolated Basin, will use both structural and non-structural best management practices to reduce stormwater pollution. The structural controls for this basin include catchbasins with sumps at storm sewer inlets. There will be a wet detention pond located inside the turning circle near the new Shared Science Facility, as well as a large catchbasin located at the base of Woodrow Street to trap particulates from Woodrow Street and downgradient of the wet detention pond.

The non structural practices include fall leaf pickup, limiting fertilizer application to no more than the plant uptake rate, minimizing the use of herbicides and pesticides, and regularly cleaning out the catchbasin sumps. Other potential treatments, if funding becomes available, are to construct bioretention cells at surface detention pond outlets and divert runoff from the Science Facility parking structure into the proposed greenhouse for treatment using "living machines" developed by the Wingra Ecological Design Project Team at Edgewood College. Bioretention cells are small storage cells that are constructed to promote a high infiltration rate and that have a high pollutant trapping efficiency. The Project Team may also develop a treatment cell design for the Woodrow Street outfall that is similar in concept to the one described for the Central Drainage Basin outfall area, if funding becomes available.

4.4. East Campus Drainage Basin and South Campus Basin

Relatively little runoff enters Lake Wingra from the East Campus Drainage Basin or the South Campus Basin because of the relatively large areas of pervious surface that promote infiltration. As construction proceeds in these areas, the campus will use grass swales as much as possible to promote sheet flow and infiltration.

5. Summary

Upon completion of all proposed construction on the Edgewood Campus, the percent of impervious surface on the campus will increase from 26% to 41%. This increase will generate a corresponding increase in the quantity of stormwater runoff, and also affect the quality of the runoff. These changes will require the construction of additional stormwater storage and conveyance facilities as well as a more active approach to improve the quality of the stormwater runoff. The following improvements will be made to the stormwater conveyance system as part of the implementation program of the Edgewood Campus Plan.

During the initial phase of construction Edgewood Inc. will:

- Construct a series of detention ponds, a storm sewer system, and a storm sewer along Woodrow Street in the West Drainage Basin to prevent the 10-year peak flow from increasing beyond 28 cfs in the City storm sewer system. This system is illustrated in Drawing 17800-B5.
- Increase the conveyance capacity of the grass swale in the Central Drainage Corridor.
- Replace the existing storm sewer pipe that drains the Campus Grade School playground to decrease the flooding that occurs in this area.
- Implement the structural and non-structural best management practices described in this report to help improve the water quality of the runoff entering Lake Wingra.

APPENDIX A

JJR

Table 1						
Edgewood Campus Drainage Areas						
Drainage Area		Existing		Proposed		Percent Change
		Area (acres)	Percent of Total	Area (acres)	Percent of Total	
North Isolated Basin						
	Impervious Area	0.8	17%	0.0		-100%
	Pervious Area	3.9	83%	0.0		-100%
	Total Area	4.7		0.0		-100%
West Campus Drainage Basin						
	Impervious Area	6.4	25%	12.4	42%	94%
	Pervious Area	18.8	75%	16.8	58%	-11%
	Total Area	25.2		29.2		16%
Central Drainage Corridor						
	Impervious Area	3.4	48%	4.3	58%	26%
	Pervious Area	3.7	52%	3.1	42%	-16%
	Total Area	7.1		7.4		4%
East Campus Drainage Basin						
	Impervious Area	2.1	22%	3.2	34%	52%
	Pervious Area	7.5	78%	6.3	66%	-16%
	Total Area	9.6		9.5		-1%
South Campus Drainage Basin						
	Impervious Area	1.1	20%	1.3	21%	18%
	Pervious Area	4.5	80%	4.8	79%	7%
	Total Area	5.6		6.1		9%
Total						
	Total Impervious Area	13.8	26%	21.2	41%	54%
	Total Pervious Area	38.4	74%	31.0	59%	-19%
	Total Area	52.2		52.2		
Note: The total area does not include the Lake Wingra Environmental Corridor because this area drains directly to Lake Wingra via sheet flow.						

JJR

Table 2							
Peak Discharge (cfs) at Basin Outlet							
		Central Drainage Corridor		West Campus			
Storm	Rainfall Depth (in)	Existing	Proposed	Existing, at City Outfall (1)	Proposed, at City Outfall (1)	Proposed, at Lake Wingra Outfall (2)	Total Proposed
1 -Year	2.5	4.7	9.7	9.1	0.0	12.9	12.9
2-Year	2.9	5.7	11.5	13.0	0.0	20.4	20.4
5-Year	3.6	7.7	13.7	21.4	0.6	36.1	36.7
10-Year	4.2	8.7	15.6	28.7	5.6	46.0	51.6
100-Year	6.0	10.4	21.2	51.3	28.3	66.8	95.1
Notes:	(1) Existing City oufall located at the base of Woodrow Street.						
	(2) Proposed outfall to Lake Wingra.						



CALCULATION SHEET

Project: Edgewood Detention Storage Sheet 1 of 2

Subject: _____ Job no. _____

By/Date: JGV Checked by/Date: _____

Composite CURVE Number - Proposed

Attachment 1

	WEST CAMPUS	CENTRAL	CN	
Imp	12.4	4.3	98	1636.6
Perv	16.8	3.1	61	<u>1213.9</u>
	29.2	7.4		2850.5

Composite CN = 78

2) STORAGE

West Pond	2	26560 CF
	6	46700
	7	5335
	9	4505
CENTRAL	1	18217

101317 CF = 2.3 ac-ft

PEAK FLOW SUMMARY - 10 YR STORM

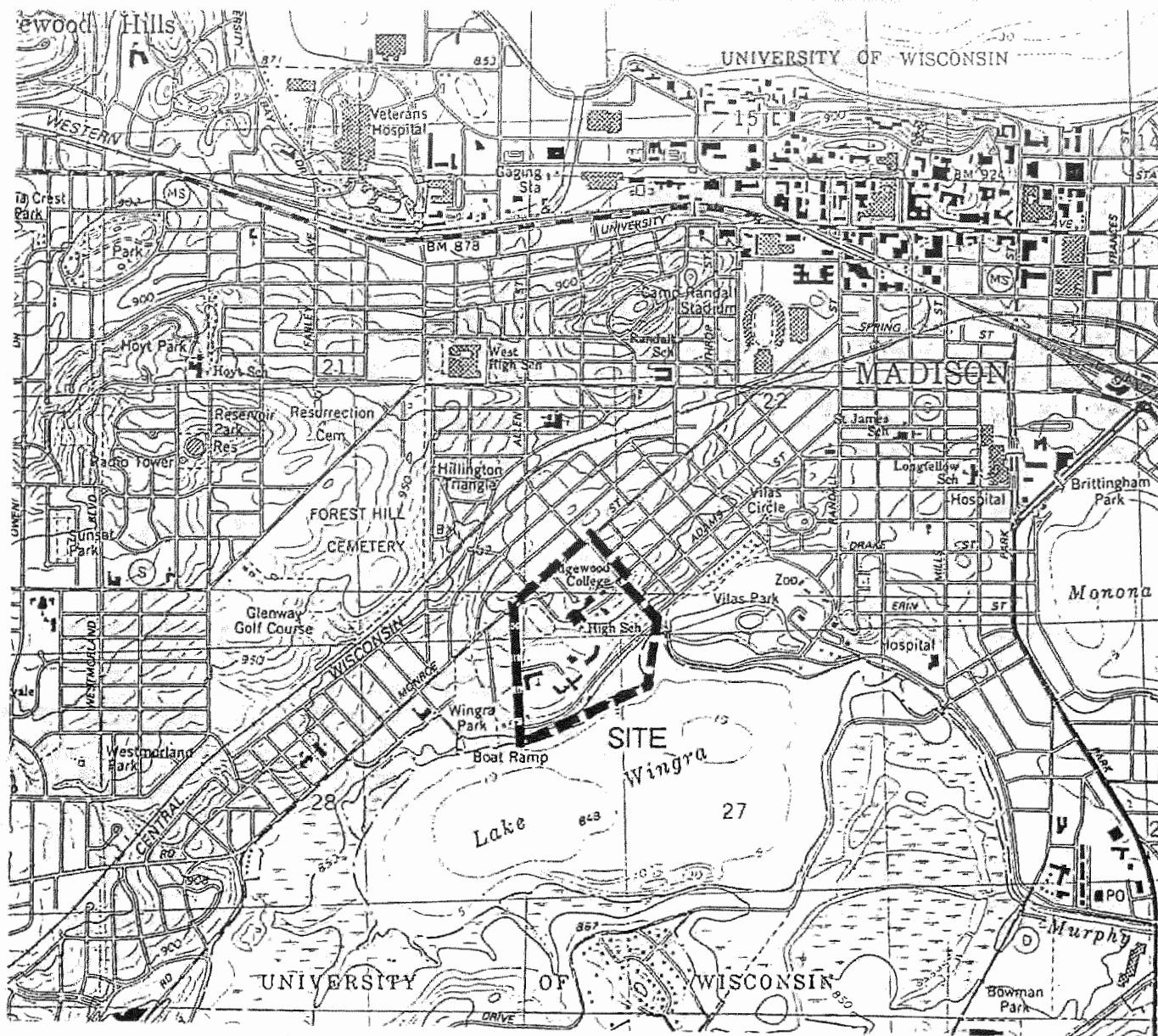
	WEST	CENTRAL	Σ
EXIST	28.7	8.7	37.4 cfs
PROPOSED	51.6	15.6	67.2 cfs

EDGEDET.N.PRN

Project : EDGEWOOD CAMPUS DETENTION STORAGE VOLUME FOR DETENTION BASINS Version 2.00
County : DANE State: WI User: JGV Date: 04-07-97
Subtitle: DETENTION STORAGE CALC Checked: _____ Date: _____

Drainage Area: 36.6 Acres Rainfall Frequency: 10 years
Rainfall-Type: II
24-Hour Rainfall: 4.1 inches Runoff Curve Number: 78
Peak Inflow: 67.2 cfs
Peak Outflow: 37.4 cfs
Runoff Volume: 2.0 inches
Detention Basin Storage Volume: 0.50 inches or 1.5 acre feet

APPENDIX B



SCALE 1:24 000

1 MILE



NOTE: BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC MAP
OF THE MADISON WEST, WISCONSIN QUADRANGLE,
DATED 1983.



SITE LOCATION

EDGEWOOD CAMPUS
STORMWATER MASTER PLAN
EDGEWOOD, INC.
MADISON, WISCONSIN

JJR/

Johnson Johnson & Roy, Inc
One North Pinckney Street
Madison, Wisconsin 53703
608-251-1177
608-251-6147 FAX

Drawn:

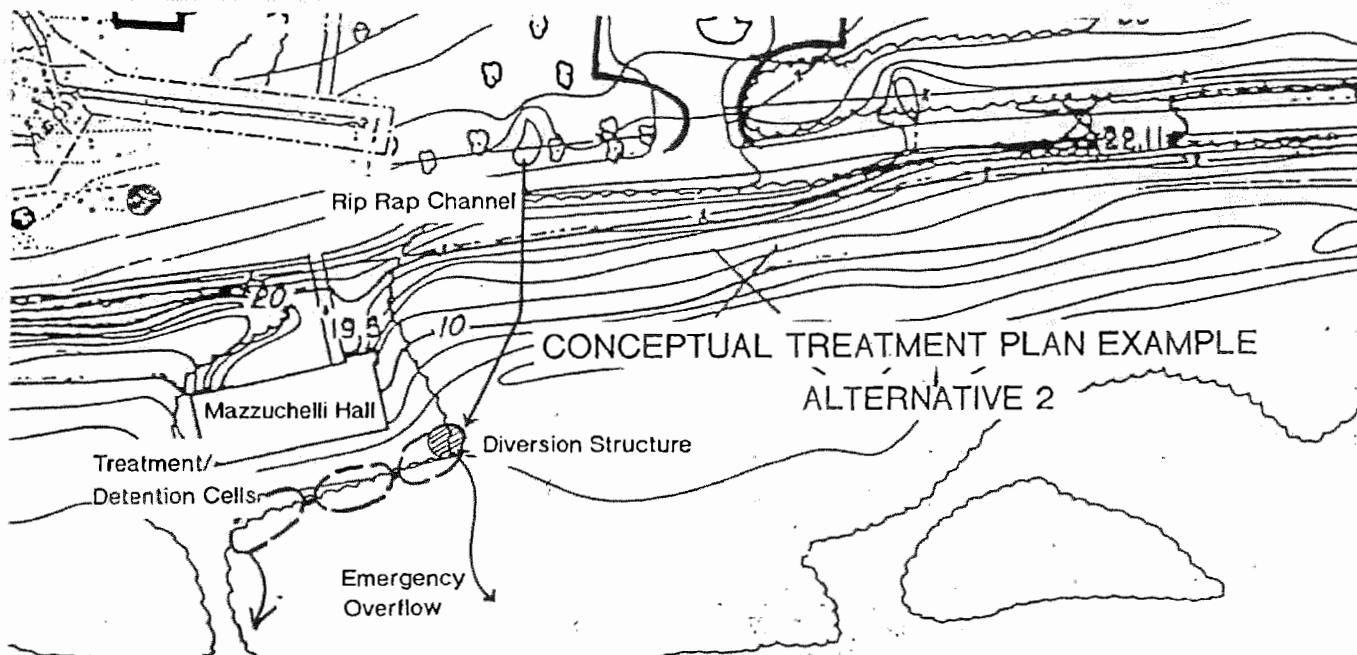
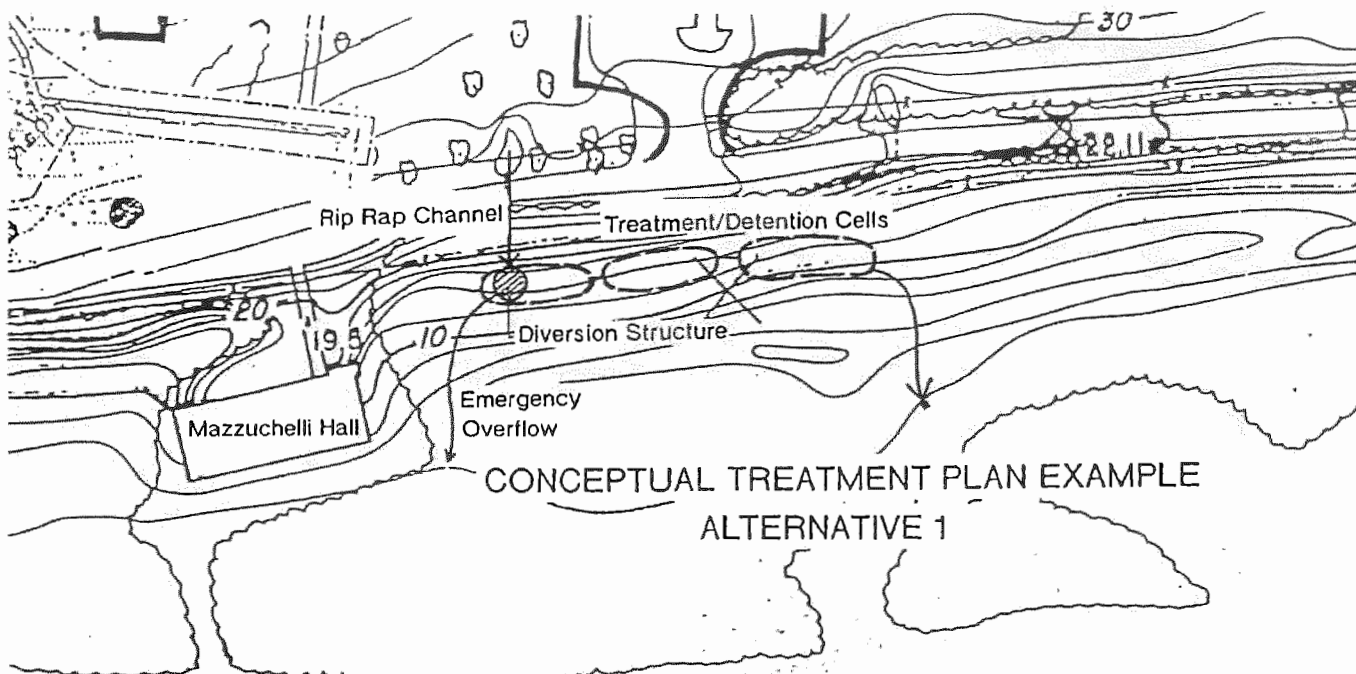
Checked:

Approved:

Date : 1/10/96

Drawing No. 17800-A1

Page. of REV.



Detention/Treatment Cell Alternative Locations

EDGEWOOD CAMPUS
STORMWATER MASTER PLAN
EDGEWOOD, INC.
MADISON, WISCONSIN

Scale: 1"=100'

JJR/

Johnson Johnson & Roy, Inc.
One North Pinckney Street
Madison, Wisconsin 53703
608-251-1177
608-251-6147 FAX

Drawn:

Checked:

Approved:

Date : 1/10/96

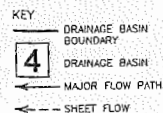
Drawing No. 17800-A2

Page. of

REV.



- 1 - NORTH ISOLATED BASIN
2 - EAST CAMPUS DRAINAGE BASIN
3 - WEST CAMPUS DRAINAGE BASIN
4 - CENTRAL DRAINAGE CORRIDOR
5 - SOUTH CAMPUS DRAINAGE BASIN
6 - LAKE WINGRA ENVIRONMENTAL CORRIDOR



One North Pinckney Street
Madison, Wisconsin 53703
608-251-1177
608-251-6147 FAX

JGV
Designed by
TPB
Drawn by
WMB
Technical Review
KML
Project Manager
FAK
Principal in Charge
FAK
Director, JSC / Mission

[illegible]

Edgewood Campus
Stormwater
Master Plan
Edgewood, Inc.
Madison, WI.

Drawing Title
Existing Drainage Basins

Drawing Number
17800-B4

Scale
1" = 200'

Sheet Number

JJR/

Johnson Johnson & Roy/Inc

Planning
Landscape Architecture
Urban Design
Civil Engineering
Environmental ServicesOne North Pinckney Street
Madison, Wisconsin 53703
608-251-1177
608-251-8147 FAX

JIR Project Number 17000.00

JGV

Designed by

TPB

Drawn by

Technical Review

Project Manager

Principal in Charge

Director, JJJ / Madison

Date

12/11/95

Final

1/16/96

Issued For

Date

Edgewood Campus
Stormwater
Master Plan
Edgewood, Inc.
Madison, WI

Drawing Title

Site Topographic Map

Drawing Number

17000-83

Scale

1" = 200'

Sheet Number

NOTES:

1. BASE MAP GENERATED BY DIGITIZING SURVEY MAPS AT VARIOUS SCALES SUPPLIED BY D'ONOFRIO KUTKE AND ASSOCIATES INC. IN THE AREA OF PROPOSED 1996 CONSTRUCTION. THE DIGITIZED MAPS WERE CONFIRMED AND/OR CORRECTED BASED ON SURVEY DATA COLLECTED FROM OCTOBER TO DECEMBER 1995, BY JJR, INCORPORATED

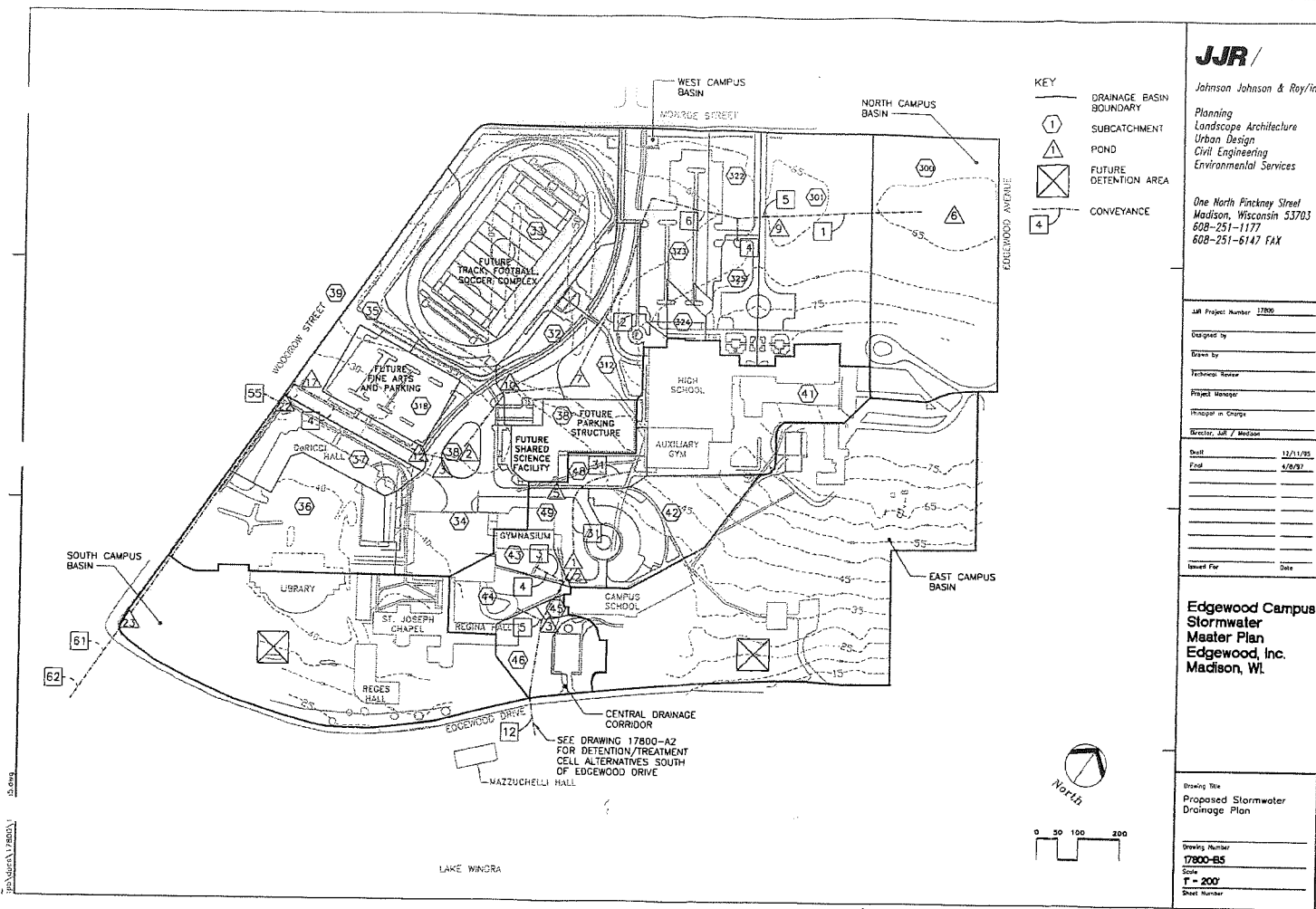
2. TOPOGRAPHIC MAPS OF THE NORTH CORNER OF THE CAMPUS, AND BETWEEN THE GRADE SCHOOL AND THE HIGH SCHOOL, WERE PREPARED FROM SURVEY DATA COLLECTED FROM OCTOBER TO DECEMBER 1995, BY JJR, INCORPORATED

3. TOPOGRAPHIC INFORMATION BETWEEN EDGEWOOD DRIVE AND LAKE WINGRA IS FROM SUMMER 1966 CITY OF MADISON TOPOGRAPHIC MAP.

4. ALL ELEVATIONS REFER TO CITY OF MADISON DATUM, WHICH IS 845.60' MSL, NGVD 1929.



LAKE WINGRA



JJR /
 Johnson Johnson & Roy, Inc.
 Planning
 Landscape Architecture
 Urban Design
 Civil Engineering
 Environmental Services
 One North Pinckney Street
 Madison, Wisconsin 53703
 608-251-1177
 608-251-6147 FAX

Job Project Number	17800
Designed by	
Drawn by	
Technical Review	
Project Manager	
Principal in Charge	
Director, JJJ / Madison	
Draft	12/1/85
Final	1/8/91
Issued For	Date

**Edgewood Campus
 Stormwater
 Master Plan
 Edgewood, Inc.
 Madison, WI.**

Drawing Title	Proposed Stormwater Drainage Plan
Drawing Number	17800-B5
Scale	1" = 200'
Sheet Number	

EXHIBIT #2

1/2/2014

Campus Master Plan			
Addition	Description	Proposed Impervious Area	Removed Imp. Area
1	Future Facility & Structured Parking	55,000 sf	48,184
2	DeRecci Hall Expansion	5,500 sf	740
3	Library Expansion	6,700 sf	0
4	Chapel Expansion	5,300 sf	740
5	Regina Hall Western Expansion	4,000 sf	980
6	Dining Expansion	6,000 sf	4,120
7	Regina Hall Eastern Expansion	19,727 sf	9,922
8	Edgedome Expansion	22,500 sf	15,444
9	Sonderegger Expansion	9,100 sf	700
10	Campus School Expansion	26,000 sf	6,000
11	High School Southern Expansion	3,400 sf	1,380
12	High School Eastern Expansion	10,300 sf	3,740
13	Siena Hall Replacement	19,400 sf	4,400
14	New Non-residential Building	14,000 sf	0
15	Marshall Hall Expansion	9,600 sf	10,390
16	New Non-Residential Building	9,300 sf	0
17	Additional Parking (30)	7,900 sf	0
Total Proposed Impervious Area =		233,727 sf	106,740

Proposed Storage req'd by "first 1/2" method" = 9,739 cf
 Existing amount of site dedicated to SWM = 15,550 sf
 Existing stormwater features to be removed = 2,290 cf
 Ultimate Total Site Area dedicated to SWM = 22,999 cf
 Total Site Area = 2,121,210 sf
 Total area for SWM as a % of site = 1.08%



SAA DESIGN GROUP
 SAA Design Group, Inc.
 101 East Madison Street
 Madison, WI 53703
 P: 608.255.0800
 F: 608.255.7750
 www.saa-design.com

Professional Seal

Revision Date
 AREA F 12/09/2013


Project Name

EDGEWOOD
 COLLEGE
 STORM WATER
 MANAGEMENT
 PLAN

CITY OF
 MADISON,
 WISCONSIN

Drawn By: MF
 Checked By: JL
 File: P-SWM
 Issued For: FINAL REPORT
 Date: 01/02/2014
 Project No. 2495

Sheet Title
 STORM WATER
 TREATMENT
 LOCATION MAP


 0 50 100 200
 Sheet Number

C1.0

EXHIBIT #3

Waukesha COUNTY

DEPARTMENT OF
PARKS AND LAND USE

First Half Inch Infiltration Standard

Waukesha County Storm Water Management and Erosion Control Ordinance

Background and Standards:

Infiltration Standards. The 2005 update to the Waukesha County Storm Water Management and Erosion Control Ordinance contains the following standards for storm water infiltration:

Land Use	Minimum Infiltration Volumes (%)		Maximum Required "Effective Infiltration Area"
	Option #1 Percent of Annual Predevelopment Runoff	Option #2 Percent of 2-Year, 24- hr. Storm Runoff	
Residential	90%	25%	1% of Site
Nonresidential	60%	10%	2% of Site

The ordinance requires that modeling involving average annual rainfall or runoff volumes shall use rainfall data from the Milwaukee area between March 28 and December 6, 1969. It also requires that separate runoff curve numbers be used for pervious and impervious surfaces, rather than composite curve numbers, when calculating runoff from the 2-year storm event.

Water Quality Standards. By design, each storm water management plan must meet the following post-development total suspended solids (TSS) reduction targets, based on average annual rainfalls, as compared to no runoff management controls:

- A. For new land development, 80% TSS reduction;
- B. For redevelopment, 40% TSS reduction;
- C. For in-fill development prior to October 1, 2012, 40 % TSS reduction;
- D. For in-fill development after October 1, 2012, 80% TSS reduction.

First Half-Inch Alternative. To meet these requirements it is normally necessary to utilize modeling tools such as SLAMM or a TR-55-based program. Modeling is a time-consuming and expensive process. As an alternative to modeling the hydrology, the Land Resources Division will presume that any site complies with both the infiltration and water quality requirements of the ordinance if the first ½ inch of runoff from the site is infiltrated. The purpose of the following discussion is to show that infiltrating the first half-inch of runoff meets or exceeds the ordinance infiltration and water quality requirements.

Infiltration

Volume Calculation for ½ Inch of Runoff. Calculation of the runoff volume is simply the area of the site multiplied by the runoff depth (1/2 inch). For example:

$$(11 \text{ acres})(43,560 \text{ sq. ft./acre})(1/2 \text{ inch})(1 \text{ foot}/12 \text{ inches}) = 19,965 \text{ cubic feet}$$

To meet the infiltration requirement, an infiltration basin with 19,965 cubic feet of dead storage (storage below the outlet) must be constructed. This assumes there is no infiltration in dynamic routing (of water passing through basin). A half-acre basin one foot deep would meet this requirement. Construction details, soils, and peak discharge must still be addressed, but the infiltration dead storage sizing has been determined in two minutes, as opposed to eight hours.

Comparison with Ordinance Standards. Infiltration of the first ½ inch of runoff meets and exceeds the ordinance standards for infiltration based on the two-year storm. The attached spreadsheet and graph illustrate that, for the two-year storm:

- For residential development, where the percent impervious surface is typically about 25-38% (and a composite TR-55 runoff curve number (RCN) on a site with type B soils is typically about 70-75), 25% of the runoff is 0.20-0.28 inches. This is 40-56% of the first ½ inch of runoff.
- For commercial development, it is impossible for 10% of the 2-year storm runoff to exceed the first ½ inch of runoff. The 2-year storm is 2.7 inches of rain, per Natural Resources Conservation Service (NRCS) Technical Publication 40. Even if 100% of the storm runs off, 10% of 2.7 inches is only 0.27 inches, which is less than 0.50 inches. At 50-65% impervious surface (typical for commercial, and comparable to a composite RCN of 80-85 in B soils), the runoff depth is 1.4-1.7 inches, of which 10% is 0.14-0.17 inches.

Water Quality

Treatment Through Infiltration. Similarly, it is assumed that the water quality requirement is met if the first ½ inch of runoff is infiltrated. The rationale for this assumption is that the vast majority of rain events are relatively small storms, that these storms remove the bulk of the TSS from the surfaces, and infiltration of the first ½ inch of runoff will result of the deposition of the TSS in the infiltration basins.

Comparison with NRCS Methodology. A review of the 1969 Milwaukee rain file indicates that, of the 116 recorded rain events, none had a depth greater than 2 inches, 3 were between 1.5 and 2 inches, 6 were between 1 and 1.5 inches, 11 were between 0.5 and 1 inches, and the rest were all smaller. The largest event is 1.96 inches of rain, which is smaller than the NRCS 1-year design storm (2.3 inches) for Waukesha County.

Using the NRCS curve number methodology, if a site has a composite curve number of 70, the initial abstraction is 0.86 inches, and the greatest predicted runoff depth is 0.23 inches. If the composite curve number is 80, the initial abstraction is 0.5 inches, and the greatest predicted runoff depth is 0.54 inches. For the 1969 rain year, then, a basin or system of BMPs designed to infiltrate the first ½ inch of runoff would discharge the equivalent of 0.04 inches of runoff depth in a single event, and no more for the remainder of the year. Assuming that TSS is uniformly distributed in the runoff and that there is no re-suspension of particles, 99.8% of the TSS would therefore be removed, exceeding the 80% requirement.

Comparison with SLAMM Methodology. The NRCS methodology is criticized for underpredicting runoff in small storm events. Use of the Source Loading and Management Model (SLAMM) is an alternate method of simulating infiltration and sediment removal performance that is designed to give a more accurate prediction of small storm hydrology.

WinSLAMM does not permit the specification of infiltration basin dead storage. Infiltration basins are described solely as a function of area and infiltration rate. Therefore, it is not possible to directly describe an infiltration basin that has dead storage equal to ½ inch of runoff from the site. However, by post-processing the output files in a spreadsheet, it is possible to determine the volume of runoff that, on an average annual basis, would exceed the dead storage capacity of the basin. The assumptions made in this modeling and processing include:

- No infiltration by dynamic routing (only the water in the dead storage is infiltrated).
- All pervious areas are silty soil.
- All impervious areas are directly connected to the drainage system, and do not drain to previous areas, first.
- All TSS in the infiltrated/stored water is removed and TSS in the excess water is discharged.

The results of this analysis show that, for a basin designed to dead-store the first ½ inch of runoff, for the 1969 Milwaukee rain file:

Percent Impervious Surface	Percent TSS Removal On Average Annual Basis	Equivalent B Soil Composite CN
0	100	61
26	100	71
57	80	82
100	62	98

As some infiltration does occur in dynamic routing, these percent removal numbers are likely conservative.

Conclusions

1. For residential development, infiltration of the first ½ inch of runoff infiltrates about 3 times as much water as is required by the 25% of the 2-year storm runoff criterion.
2. For commercial development, infiltration of the first ½ inch of runoff exceeds the 10% of the 2-year storm runoff criterion for all levels of imperviousness.
3. For the rain file prescribed by the ordinance, infiltration of the first ½ inch of runoff meets the water quality requirement of 80% TSS removal up to 57% impervious surface.

APPENDIX A

New Roofs

Data file name: P:\2400\2495-EdgewoodTrans\Doc\Reports\Stormwater\SLAMM\New Roofs.dat
 SLAMM Version 9.4.0
 Rain file name: C:\Program Files (x86)\winSLAMM\Rain Files\WisReg - Madison WI 1981.RAN
 Particulate Solids Concentration file name: C:\Program Files (x86)\winSLAMM\WI_AVG01.psc
 Runoff Coefficient file name: C:\Program Files (x86)\winSLAMM\WI_SL06 Dec06.rsv
 Particulate Residue Delivery file name: C:\Program Files (x86)\winSLAMM\WI_DLV01.prr
 Residential Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
 Institutional Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
 Commercial Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
 Industrial Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
 Other Urban Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
 Freeway Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
 Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
 Pollutant Relative Concentration file name: C:\Program Files (x86)\winSLAMM\WI_GEO01.ppd
 Seed for random number generator: -42
 Study period starting date: 01/01/81 Study period ending date: 12/31/81
 Start of winter Season: 12/02 End of winter Season: 03/12
 Date: 06-06-2013 Time: 13:22:46
 Fraction of each type of Drainage System serving study area:
 1. Grass Swales 0
 2. Undeveloped roadside 0
 Curb and Gutters, 'valleys', or sealed swales in:
 3. Poor condition (or very flat) 0
 4. Fair condition 0
 5. Good condition (or very steep) 1
 Site information:
 Edgewood College

Source Area	<===== Areas for each Source (acres) =====>				
	Residential Areas	Institutional Areas	Commercial Areas	Industrial Areas	Other Urban Areas
Roofs 1	0.000	4.420	0.000	0.000	0.000
Roofs 2	0.000	0.000	0.000	0.000	0.000
Roofs 3	0.000	0.000	0.000	0.000	0.000
Roofs 4	0.000	0.000	0.000	0.000	0.000
Roofs 5	0.000	0.000	0.000	0.000	0.000
Paved Parking/Storage 1	0.000	0.200	0.000	0.000	0.000
Paved Parking/Storage 2	0.000	0.000	0.000	0.000	0.000
Paved Parking/Storage 3	0.000	0.000	0.000	0.000	0.000
Unpaved Prkng/Storage 1	0.000	0.000	0.000	0.000	0.000
Unpaved Prkng/Storage 2	0.000	0.000	0.000	0.000	0.000
Playground 1	0.000	0.000	0.000	0.000	0.000
Playground 2	0.000	0.000	0.000	0.000	0.000
Driveways 1	0.000	0.000	0.000	0.000	0.000
Driveways 2	0.000	0.000	0.000	0.000	0.000
Driveways 3	0.000	0.000	0.000	0.000	0.000
Sidewalks/walks 1	0.000	0.520	0.000	0.000	0.000
Sidewalks/walks 2	0.000	0.000	0.000	0.000	0.000
Street Area 1	0.000	0.000	0.000	0.000	0.000
Street Area 2	0.000	0.000	0.000	0.000	0.000

		New Roofs			
Street Area 3	0.000	0.000	0.000	0.000	0.000
Large Landscaped Area 1	0.000	0.000	0.000	0.000	0.000
Large Landscaped Area 2	0.000	0.000	0.000	0.000	0.000
Undeveloped Area	0.000	0.000	0.000	0.000	0.000
Small Landscaped Area 1	0.000	0.000	0.000	0.000	0.000
Small Landscaped Area 2	0.000	0.000	0.000	0.000	0.000
Small Landscaped Area 3	0.000	0.000	0.000	0.000	0.000
Isolated/Water Body Area	0.000	0.000	0.000	0.000	0.000
Other Pervious Area	0.000	0.000	0.000	0.000	0.000
Other Dir Cnctd Imp Area	0.000	0.000	0.000	0.000	0.000
Other Part Cnctd Imp Area	0.000	0.000	0.000	0.000	0.000
Total	0.000	5.140	0.000	0.000	0.000

Freeway Source Area Area (acres)

Pavd Lane & Shldr Area 1	0.000
Pavd Lane & Shldr Area 2	0.000
Pavd Lane & Shldr Area 3	0.000
Pavd Lane & Shldr Area 4	0.000
Pavd Lane & Shldr Area 5	0.000
Large Turf Areas	0.000
Undeveloped Areas	0.000
Other Pervious Areas	0.000
Other Directly Conctd Imp	0.000
Other Partially Conctd Imp	0.000
Total	0.000

Total of All Source Areas 5.140

Total of All Source Areas less All Isolated Areas 5.140

Source Area Control Practice Information

Land Use: Institutional

Roofs 1 Source area number: 31

The roof is flat

The Source Area is draining to a pervious area (partially connected impervious area)

The SCS Hydrologic Soil Type is Silty

Paved Parking/Storage 1 Source area number: 36

The Source Area is draining to a pervious area (partially connected impervious area)

The SCS Hydrologic Soil Type is Silty

Sidewalks/walks 1 Source area number: 46

The Source Area is draining to a pervious area (partially connected impervious area)

The SCS Hydrologic Soil Type is Silty

Drainage System

Outfall

Pollutants to be Analyzed and Printed:

Pollutant Name	Pollutant Type
Solids	Particulate
Solids	Filterable
Solids	Total
Phosphorus/Phosphate	Particulate

Phosphorus/Phosphate
Phosphorus/Phosphate
Nitrate
Total Kjeldahl Nitrogen
Total Kjeldahl Nitrogen
Total Kjeldahl Nitrogen
Copper
Copper
Copper
Lead
Lead
Lead
Zinc
Zinc
Zinc
Other 1
Other 1
Other 1
Other 2

New Roofs
Filterable
Total
Filterable
Particulate
Filterable
Total
Particulate
Filterable
Total
Particulate
Filterable
Total
Particulate
Filterable
Total
Particulate
Filterable
Total
Particulate

9

New Roofs - Output Summary

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Data file name: P:\2400\2495-EdgewoodTrans\Doc\Reports\Stormwater\SLAMM\New Roofs.dat
Data file description: Edgewood College
Rain file name: C:\Program Files (x86)\winSLAMM\Rain Files\wisReg - Madison WI 1981.RAN
Particulate Solids Concentration file name: C:\Program Files (x86)\winSLAMM\WI_AVG01.psc
Runoff Coefficient file name: C:\Program Files (x86)\winSLAMM\WI_SL06 Dec06.rsv
Particulate Residue Delivery file name: C:\Program Files (x86)\winSLAMM\WI_DLV01.prr
Residential Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
Institutional Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
Freeway Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com Inst Indust Dec06.std
Pollutant Relative Concentration file name: C:\Program Files (x86)\winSLAMM\WI_GE001.ppd
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Model Run Start Date: 01/01/81 Model Run End Date: 12/31/81
Date of run: 06-06-2013 Time of run: 13:22:57
Total Area Modeled (acres): 5.14
Years in Model Run: 1.00

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Source Area Total without Controls:	32264	0 %	41.02	82.63	0 %
Total Before Drainage System:	32264	0.00%	41.02	82.62	0.01%
Total After Drainage System:	32264	0.00%	41.02	82.62	0.01%
Total After Outfall Controls:	32264	0.00%	41.02	82.62	0.01%
Annualized Total After Outfall Controls:	32353			82.85	

Existing Parking

Data file name:

P:\2400\2495-EdgewoodTrans\Doc\Reports\Stormwater\SLAMM\Existing Parking.dat
SLAMM Version 9.4.0

Rain file name: C:\Program Files (x86)\winSLAMM\Rain Files\wisReg - Madison
WI 1981.RAN

Particulate Solids Concentration file name: C:\Program Files
(x86)\winSLAMM\WI_AVG01.psc

Runoff Coefficient file name: C:\Program Files (x86)\winSLAMM\WI_SL06
Dec06.rsv

Particulate Residue Delivery file name: C:\Program Files
(x86)\winSLAMM\WI_DLV01.prr

Residential Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com
Inst Indust Dec06.std

Institutional Street Delivery file name: C:\Program Files
(x86)\winSLAMM\WI_Com Inst Indust Dec06.std

Commercial Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com
Inst Indust Dec06.std

Industrial Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com
Inst Indust Dec06.std

Other Urban Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com
Inst Indust Dec06.std

Freeway Street Delivery file name: C:\Program Files (x86)\winSLAMM\WI_Com
Inst Indust Dec06.std

Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass
Balance: False

Pollutant Relative Concentration file name: C:\Program Files
(x86)\winSLAMM\WI_GEO01.ppd

Seed for random number generator: -42

Study period starting date: 01/01/81 Study period ending date:
12/31/81

Start of winter Season: 12/02 End of winter Season: 03/12
Date: 06-06-2013 Time: 13:22:40

Fraction of each type of Drainage System serving study area:

1. Grass Swales 0
2. Undeveloped roadside 0
- Curb and Gutters, 'valleys', or sealed swales in:
 3. Poor condition (or very flat) 0
 4. Fair condition 0
 5. Good condition (or very steep) 1

Site information:

Edgewood College

	<==== Areas for each Source (acres) =====>				
Source Area	Resi- dential Areas	Institu- tional Areas	Commercial Areas	Industrial Areas	Other Urban Areas
Roofs 1	0.000	1.380	0.000	0.000	0.000
Roofs 2	0.000	0.000	0.000	0.000	0.000
Roofs 3	0.000	0.000	0.000	0.000	0.000
Roofs 4	0.000	0.000	0.000	0.000	0.000
Roofs 5	0.000	0.000	0.000	0.000	0.000
Paved Parking/Storage 1	0.000	3.860	0.000	0.000	0.000
Paved Parking/Storage 2	0.000	0.000	0.000	0.000	0.000
Paved Parking/Storage 3	0.000	0.000	0.000	0.000	0.000
Unpaved Prkng/Storage 1	0.000	0.000	0.000	0.000	0.000
Unpaved Prkng/Storage 2	0.000	0.000	0.000	0.000	0.000
Playground 1	0.000	0.000	0.000	0.000	0.000
Playground 2	0.000	0.000	0.000	0.000	0.000
Driveways 1	0.000	0.000	0.000	0.000	0.000
Driveways 2	0.000	0.000	0.000	0.000	0.000
Driveways 3	0.000	0.000	0.000	0.000	0.000
Sidewalks/walks 1	0.000	2.140	0.000	0.000	0.000
Sidewalks/walks 2	0.000	0.000	0.000	0.000	0.000
Street Area 1	0.000	0.000	0.000	0.000	0.000
Street Area 2	0.000	0.000	0.000	0.000	0.000
Street Area 3	0.000	0.000	0.000	0.000	0.000

		Existing Parking			
Large Landscaped Area 1	0.000	6.480	0.000	0.000	0.000
Large Landscaped Area 2	0.000	0.000	0.000	0.000	0.000
Undeveloped Area	0.000	0.000	0.000	0.000	0.000
Small Landscaped Area 1	0.000	0.000	0.000	0.000	0.000
Small Landscaped Area 2	0.000	0.000	0.000	0.000	0.000
Small Landscaped Area 3	0.000	0.000	0.000	0.000	0.000
Isolated/Water Body Area	0.000	0.000	0.000	0.000	0.000
Other Pervious Area	0.000	0.000	0.000	0.000	0.000
Other Dir Cnctd Imp Area	0.000	0.000	0.000	0.000	0.000
Other Part Cnctd Imp Area	0.000	0.000	0.000	0.000	0.000
Total	0.000	13.860	0.000	0.000	0.000

Freeway Source Area Area (acres)

Pavd Lane & Shldr Area 1	0.000
Pavd Lane & Shldr Area 2	0.000
Pavd Lane & Shldr Area 3	0.000
Pavd Lane & Shldr Area 4	0.000
Pavd Lane & Shldr Area 5	0.000
Large Turf Areas	0.000
Undeveloped Areas	0.000
Other Pervious Areas	0.000
Other Directly Conctd Imp	0.000
Other Partially Conctd Imp	0.000

Total 0.000

Total of All Source Areas 13.860

Total of All Source Areas
less All Isolated Areas 13.860

Source Area Control Practice Information

Land Use: Institutional

Roofs 1 Source area number: 31

The roof is flat

The Source Area is draining to a pervious area (partially connected impervious area)

The SCS Hydrologic Soil Type is Silty

Paved Parking/Storage 1 Source area number: 36

The Source Area is draining to a pervious area (partially connected impervious area)

The SCS Hydrologic Soil Type is Silty

Sidewalks/Walks 1 Source area number: 46

The Source Area is draining to a pervious area (partially connected impervious area)

The SCS Hydrologic Soil Type is Silty

Large Landscaped Area 1 Source area number: 51

The SCS Hydrologic Soil Type is Silty

Drainage System

outfall

Pollutants to be Analyzed and Printed:

Pollutant Name	Pollutant Type
Solids	Particulate
Solids	Filterable
Solids	Total
Phosphorus/Phosphate	Particulate
Phosphorus/Phosphate	Filterable
Phosphorus/Phosphate	Total

	Existing Parking
Nitrate	Filterable
Total Kjeldahl Nitrogen	Particulate
Total Kjeldahl Nitrogen	Filterable
Total Kjeldahl Nitrogen	Total
Copper	Particulate
Copper	Filterable
Copper	Total
Lead	Particulate
Lead	Filterable
Lead	Total
Zinc	Particulate
Zinc	Filterable
Zinc	Total
Other 1	Particulate
Other 1	Filterable
Other 1	Total
Other 2	Particulate

+

Existing Parking - Output Summary

SLAMM for Windows Version 9.4.0

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Data file name: P:\2400\2495-EdgewoodTrans\Doc\Reports\Stormwater\SLAMM\Existing Parking.dat
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 Pollutant Relative Concentration file name: C:\Program Files (x86)\winSLAMM\WI_GE001.ppd
 Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
 Model Run Start Date: 01/01/81 Model Run End Date: 12/31/81
 Date of run: 06-06-2013 Time of run: 13:23:09
 Total Area Modeled (acres): 13.86
 Years in Model Run: 1.00

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Source Area Total without Controls:	87000	0 %	157.2	853.8	0 %
Total Before Drainage System:	86999	0.00%	157.2	853.8	0.00%
Total After Drainage System:	86999	0.00%	157.2	853.8	0.00%
Total After Outfall Controls:	86999	0.00%	157.2	853.8	0.00%
Annualized Total After Outfall Controls:	87238			856.2	

A.4

**NEIGHBORHOOD PERSPECTIVE ON
THE LIAISON TEAM PROCESS**

A.

NEIGHBORHOOD PERSPECTIVES ON THE LIAISON TEAM PROCESS

January 7, 2014

The following was submitted by the Dudgeon Monroe and Vilas Neighborhood Association members of the Edgewood Neighborhood Liaison Committee for inclusion into the Appendix of the Edgewood Master Plan.

The Edgewood/Neighborhood Liaison Committee, the DMNA and VNA representatives to the Committee, and other concerned neighbors have had numerous meetings throughout 2013 regarding the proposed Master Plan. It is important to note that at the outset there were numerous objections from neighbors regarding almost all aspects of the plan. Both the neighborhoods and Edgewood were determined to try to avoid the stalemates and acrimony that resulted from development disputes in the past, most recently before the construction of Dominican Hall dormitory. Over time, and as a result of the meetings, and in a spirit of neighborliness and compromise borne of the willingness of all parties to negotiate, the neighbors have chosen to accept many things that they didn't want regarding growth of the Edgewood Campus operation. The items neighbors have agreed not to oppose are described below.

Edgewood has proposed to add an additional 247 students to the on campus dorm population. This represents a 44% increase. Many neighbors thought that this was too large a number. The College provided data supporting its need for the increase and, in return for the neighbors' agreement not to oppose the increase in on-campus enrollment, the College recommitted to continuing its efforts to mitigate the impact of these additional students on the neighborhood.

There also was significant opposition to the size, scale and possible uses of the four new buildings proposed for the edges of the campus adjacent to the neighborhoods and the Park and Pleasure Drive. It was feared that the buildings would be incompatible with residential character of the rest of the neighborhood. The neighbors agreed to not oppose these structures once detail was provided in the plan regarding these buildings, with design elements for buildings and landscaping that would respect the residential nature and quality of the adjacent neighborhoods.

With the exception of site 1 which has a 91 foot setback at the southwest corner, buildings planned for the perimeter of the campus are shown with 70 foot setbacks instead of the 100 feet neighbors remembered as the promised setback from previous master plans. After details regarding the 70 foot setback and landscaped buffer zones were agreed on, the neighbors withdrew their opposition. And although the neighbors also had significant opposition to the lack of any setback along the Park and Pleasure Drive, the neighbors dropped their opposition based on the legal status of the Park and Pleasure Drive, including that it must be maintained as having a park-like quality.

There were significant initial concerns about increased traffic from the planned expansion. The Traffic Plan addressed most of these concerns and opposition to the Master Plan based on increased traffic was dropped.

A first look at the building footprint map shows an approximate doubling of the footprint of structures on the campus. Many neighbors expressed a fear that this much expansion would not be sustainable. The neighbors realize that this statement is difficult to quantify and therefore will not oppose the proposed expansion of building footprint.

Lastly, in reference to the newly-created Architectural Design Review Committee, the Dudgeon-Monroe and Vilas Neighborhood Association representatives respectfully request that the City of Madison be receptive to reassessing the success of this new approval process. We recommend that the City of Madison staff meet with the Edgewood Neighborhood Liaison Committee at the end of the first building project to which it is applied to determine the effectiveness of this process.

A.5

**CITY PLAN COMMISSION
APPROVAL LETTER**



Department of Planning & Community & Economic Development

Planning Division

Katherine Cornwell, Director

Madison Municipal Building, Suite LL-100

215 Martin Luther King, Jr. Boulevard

P.O. Box 2985

Madison, Wisconsin 53701-2985

Phone: (608) 266-4635

Fax (608) 267-8739

www.cityofmadison.com

April 22, 2014

Doug Hursh
Potter Lawson, Inc.
749 University Row, Suite 300
Madison, Wisconsin 53705

RE: Adopting a Campus-Institutional (CI) District Master Plan for Edgewood College, Edgewood High School and Edgewood Campus School, generally addressed as 2219 Monroe Street and 829-1000 Edgewood College Drive as an integral part of the Zoning Code (Maggie Balistreri-Clarke, Edgewood College).

Dear Mr. Hursh;

At its April 8, 2014 meeting, the Common Council **approved** a Campus-Institutional (CI) District Master Plan for Edgewood College, Edgewood High School and Edgewood Campus School subject to the conditions that follow. These conditions of approval shall be satisfied prior to the master plan taking effect and the issuance of building permits for any of the projects contained in the plan:

Conditions of Approval	Edgewood Response
Please contact Janet Schmidt of the City Engineering Division at 261-9688 if you have questions regarding the following nine (9) items:	
1. This area falls within the TMDL zone for the City of Madison. As a result, the campus will be subject to higher erosion control standards at the time of development, as authorized by State code and City resolution. Contact Tim Troester at 608-267-1995 or ttroester@cityofmadison.com for details.	- Acknowledged; no changes to Master Plan
2. This site, while partially a redevelopment, does not fully qualify for that category for storm water management. City ordinances define redevelopment as removal of a commercial structure. Further, this site is subject to TMDL standards and must get 80% TSS control compared to existing conditions when taken en mass.	- Acknowledged; no changes to Master Plan
3. The proposed concept for storm water management is innovative and supported, but details must be reviewed and approved by City Engineering.	- Details to be submitted once projects move forward; no changes
4. In the event that any future building additions or site improvements within the Edgewood Campus would increase traffic volume on any of the public streets adjacent to or serving the Campus, the applicant shall coordinate with the City Engineering Division and Traffic Engineering Division to provide any dedications necessary to accommodate any required street and traffic improvements.	- Acknowledged; no changes to Master Plan

5. A width shall be specified for the Park and Pleasure Drive Landscape Buffer Zone shown on the Open Spaces Diagram.	- Width is now shown on open spaces diagram in Section 3.8
6. The Public Water Main Loop under Edgewood College Drive and the Madison Metropolitan Sewerage District Sewer Interceptor shall be shown and identified on the Existing Conditions Map.	- A new drawing is added to Existing Conditions, Section 2.3 that shows city water utilities
7. Any additions or improvements within the Edgewood Campus that would impact Edgewood Drive (Park and Pleasure Drive) shall be approved by the City of Madison to assure conformance with any restrictions set out by the Park and Pleasure Drive easement and agreement documents.	- Acknowledged; no changes to Master Plan
8. An erosion control plan and land disturbing activity permit shall be submitted to the City Engineering Division for review and approval prior to grading or any other construction activities. The Preconstruction Meeting for Public Improvements shall not be scheduled prior to issuance of this permit. The applicant shall demonstrate compliance with Section 37.07 and 37.08 of the Madison General Ordinances regarding permissible soil loss rates. The erosion control plan shall include Universal Soil Loss Equation (USLE) computations for the construction period. Measures shall be implemented in order to maintain a soil loss rate below 7.5-tons per acre per year.	- Acknowledged; no changes to Master Plan
9. Prior to approval, this project shall comply with Chapter 37 of the Madison General Ordinances regarding storm water management. Specifically, this development is required to: detain the 2- and 10-year storm events; reduce TSS off of the proposed development by 80% when compared with the existing site; provide oil and grease control from the first 1/2" of runoff from parking areas, and; complete an erosion control plan and complete weekly self-inspection of the erosion control practices and post these inspections to the City of Madison website as required by Chapter 37 of the Madison General Ordinances.	- Acknowledged; no changes to Master Plan
Please contact Eric Halvorson of the Traffic Engineering Division at 266-6527 if you have any questions regarding the following five (5) items:	
10. The City of Madison continues to receive complaints from residents and School Crossing guards regarding the difficulty crossing Monroe Street at Edgewood Avenue due to the offset geometry of the intersection. Realigning the east leg with the west Leg of Edgewood Avenue at Monroe Street would contribute to improved pedestrian safety and would encourage walking within the neighborhood, including for students of the Edgewood Campus. Realignment would also allow higher-level pedestrian or traffic improvements at the intersection that are currently not feasible. Given the many large growth mature trees within the area necessary to realign, realignment of the intersection in the short term is not likely. The plan shall include a long term goal of realigning the intersection to improve pedestrian safety and restrict new infrastructure or landscaping within the area necessary to properly realign the intersection.	- Note 21 is added to the campus plan graphic and narrative in Section 3.2
11. The applicant shall submit one contiguous plan for approval. The plan drawing shall be scaled to 1" = 20' and include the following, when applicable: existing and	- Acknowledged that these plans

proposed property lines; parcel addresses; all easements; pavement markings; signing; building placement; items in the terrace such as signs, street light poles, hydrants; surface types such as asphalt, concrete, grass, sidewalk; driveway approaches, including those adjacent to and across street from the project lot location; parking stall dimensions, including 2 feet of vehicle overhang; drive aisle dimensions; semitrailer movement and vehicle routes; dimensions of radii; and percent of slope.	are needed once a project moves forward; no changes to Master Plan
12. The applicant shall post a security deposit prior to the start of future development. In the event that modifications need to be made to any City owned and/or maintained traffic signals, street lighting, signing, pavement marking and conduit/handholes, the developer shall reimburse the City for all associated costs including engineering, labor and materials for both temporary and permanent installations.	- Acknowledged; no changes to Master Plan
13. The City Traffic Engineer may require public signing and marking related to the development; the developer shall be financially responsible for such signing and marking.	- Acknowledged; no changes to Master Plan
14. All parking facility design shall conform to the standards in MGO Section 10.08(6).	- Acknowledged; no changes to Master Plan
Please contact Matt Tucker, Zoning Administrator, at 266-4569 if you have any questions regarding the following three (3) items:	
15. All relevant sections of the Zoning Code and Madison General Ordinances, which may be amended from time to time, shall apply to this Campus Master Plan, unless otherwise noted in the final approved Master Plan documents.	- Acknowledged; no changes to Master Plan
16. The final master plan shall include a section with an analysis of the existing and proposed demand for bicycle parking facilities for the three campuses, including a phasing plan for how bicycle parking facilities will be upgraded/ implemented. This can be established through the Process for Approvals section (Section 4.5). The master plan shall include language that establishes required amount of bicycle parking facilities for on-site residents, be designed as <i>long-term</i> bike parking and facilities for non-resident student/ employee/ visitor bike parking, designed as <i>short-term</i> bike parking. See MGO Sec. 28.141(11) and 28.211 for relevant definitions and requirements.	- A bicycle parking plan has been added in section 3.12
17. Per MGO Sec. 31.021(1)(a), this Campus Institutional zoned property shall have signage as allowed for Group 1 districts, primarily regulated by Sec. 31.14. Given the size, scale, number of buildings and shared relationship across the three distinct campuses, it is likely future signage needs will require approval as a Comprehensive Design Review (CDR) for signage, per Sec. 31.043(4).	- Acknowledged; no changes to Master Plan
Please contact Dennis Cawley of the Madison Water Utility at 261-9243 if you have any questions regarding the following item:	
18. Note: All operating private wells shall be identified and permitted and any unused private wells shall be abandoned by the Madison Water Utility in accordance with MGO Section 13.21.	- Acknowledged; no changes to Master Plan
Please contact Bill Sullivan of the Madison Fire Department at 261-9658 if you have any questions regarding the following item:	

19. Note: The Madison Fire Department does not object to the master plan provided that the subsequent projects comply with all applicable fire codes and ordinances.	- Acknowledged; no changes to Master Plan
Please contact Kay Rutledge of the Parks Division at 266-4714 if you have any questions regarding the following three (3) items:	
20. Park impact fees (comprised of the Park Development Impact Fee per MGO Sec. 20.08(2) and the Parkland Impact Fee in Lieu of Land Dedication per MGO Sec. 16.23(8)(f) and 20.08(6)) will be required for all new residential development, including dormitories. Park impact fees will be determined when subsequent plans are submitted for review and approval. This development is within the Vilas-Brittingham park impact fee district (SI27). Please reference ID# 14107.1 when contacting Parks Division staff about this site.	- See letter from Parks Department in Appendix A.6
21. Section 4.3 of the Master Plan shall also include the Edgewood Drive Park and Pleasure Drive easement and amended agreement between Edgewood and the City of Madison, executed May 22, 1997, and amended December 26, 2008.	- Agreements are added to the appendix section A.7 and referenced in Section 4.3 (Page 70)
22. Approval of plans for this project does not include any approval to prune, remove or plant trees in the public right-of-way. Permission for such activities must be obtained from the City Forester, 266-4816.	- Acknowledged; no changes to Master Plan
Please contact my office at 261-9632 if you have any questions about the following items, including the revisions and conditions recommended by the Plan Commission on March 24, 2014:	
23. Revise the master plan prior to final approval to provide a range in square feet for all of the proposed projects identified in the plan, including the proposed campus school and high school additions identified on pages 24-26. Where not indicated, the minimum and maximum number of floors for those projects shall also be provided.	- Building areas are added to Campus Plan Narrative 3.2
24. The final master plan shall include a to-scale, dimensioned site plan for the entire campus that includes the minimum setbacks of any future buildings located along Woodrow Street or Edgewood Avenue as measured from the back of curb of those streets <u>and</u> the property lines to provide both reference points in the plan.	- Setbacks to property lines are added to 3.3 Perimeter Building Setback diagrams
25. That the final text of Section 4.5 be approved by the Planning Division to address minor edits needed to the January 22, 2014 document on the operation and function of the Architectural Design Review Committee.	- Text has been changed based on Planning Division edits
26. The final master plan document shall include a detailed survey of historic resources located on the campus overlaid on a land survey of the property prepared by a Registered Land Surveyor. This historic resources survey shall be approved by the City's Preservation Planner and shall serve as the official record of said resources going forward, replacing or superseding any such previous plans or documents.	- A survey of mounds by JSD is located in section 2.2 and in Appendix in 11x17 Format

27. That references to Edgewood (Park & Pleasure) Drive be consistent in the master plan narrative and maps.	- Changed throughout document
28. That a table be included in the master plan body that details the number and location of parking stalls to be added or removed similar to the tables on page 22.	- Parking table added in Section 3.10
29. That the actions steps/ recommendations be pulled into the body of the master plan from the appendix.	- Sections 3.10 and 3.11 added
30. That the Plan Commission representative and design/ planning experience references be removed from the neighborhood association representative vetting sub-section in Section 4.5 on page 61 of the plan body.	- Changed in Section 4.5
31. As part of its action on the Campus Master Plan, the Plan Commission approved the composition of the Architectural Design Review Committee in Section 4.5 but clarified that they did not wish to approve the individual members of that group.	- Changed in Section 4.5
Specific questions regarding the comments or conditions contained in this letter should be directed to the commenting agency.	
Please now follow the procedures listed below for obtaining permits for your project:	
1. After the master plan has been revised to address any of the comments or conditions listed above, please file ten (10) copies of the final plan with the Zoning Administrator, Room LL-100, Madison Municipal Building, 215 Martin Luther King, Jr. Boulevard for circulation to the City department staff listed above for their final approval prior to the master plan taking effect. No building permits shall be issued until the plan has been revised to address the comments and conditions in this letter.	- Acknowledged; no changes to Master Plan
2. All buildings constructed within a CI district with an approved master plan shall be reviewed and approved by the architectural review committee approved by the Plan Commission. Said committee meetings shall be public.	- Acknowledged; no changes to Master Plan
3. No alteration of an approved Campus Master Plan, including changes to the proposed use of identified open space areas and other open space uses, shall be permitted unless approved by the Plan Commission, provided however, the Zoning Administrator may, following consideration by the alderperson of the district, issue permits for minor alterations that are approved by the Director of Planning and Community and Economic Development and are consistent with the concept approved by the Common Council. If the change or addition constitutes a substantial alteration of the original plan, the procedure in Sec. 28.097(2) is required.	- Acknowledged; no changes to the Master Plan

If you have any questions regarding interpretation of the master plan or obtaining building permits in the future, please contact the Matt Tucker, the Zoning Administrator, at 266-4551. If you have any questions or if may be of any further assistance, please do not hesitate to contact my office at 261-9632.

Sincerely,

Timothy M. Parks
 Planner

cc: Janet Schmidt, City Engineering Division
Eric Halvorson, Traffic Engineering Division
Matt Tucker, Zoning Administrator
Dennis Cawley, Madison Water Utility
Bill Sullivan, Madison Fire Department
Kay Rutledge, Parks Division

For Official Use Only, Re: Final Master Plan Approval Routing			
<input checked="" type="checkbox"/>	Planning Div. (T. Parks)	<input checked="" type="checkbox"/>	Engineering Mapping Sec.
<input checked="" type="checkbox"/>	Zoning Administrator	<input checked="" type="checkbox"/>	Parks Division
<input checked="" type="checkbox"/>	City Engineering	<input checked="" type="checkbox"/>	Urban Design Commission
<input checked="" type="checkbox"/>	Traffic Engineering	<input type="checkbox"/>	Recycling Coord. (R&R)
<input checked="" type="checkbox"/>	Fire Department	<input type="checkbox"/>	Other:

A.6

**PARKS DEPARTMENT –
PARKS IMPACT FEE LETTER**



Kevin Briski
Madison Parks Superintendent

Madison Parks Division
www.cityofmadison.com/parks

Administrative Office
Planning and Development
Community & Recreation Services
210 ML King, Jr. Blvd. Rm. 104
P.O. Box 2987
Madison, WI 53701-2987
Phone: 608.266.4711
Fax: 608.267.1162
Textnet: 866.704.2315

Parks Operations Offices
Goodman Maintenance Facility
1402 Wingra Creek Pkwy.
West Parks, 608.266.9214
Summit, 608.288.6164
West Forestry, 608.266.4816
Construction, 608.266.6289
Conservation, 608.267.4918

Sycamore Maintenance Facility
4602 Sycamore Ave.
East Parks, 608.246.4508
East Forestry, 608.266.4816

Olbrich Botanical Gardens
3330 Atwood Ave., 608.246.4550

Warner Park Community
Recreation Center
1625 Northport Dr., 608.245.3690

Irwin A. & Robert D. Goodman Pool
325 Olin Ave., 608.264.9292

Golf Madison Parks
Supervisor, 608.838.3920
Glenway Golf Course
3747 Speedway Rd., 608.266.4737
Monona Golf Course
111 East Dean Ave., 608.266.4736
Odana Hills Golf Course
4635 Odana Rd., 608.266.4724
Yahara Hills Golf Course
6701 E. Broadway, 608.838.3126

State Street Mall/Concourse
Maintenance
120 S. Fairchild St., 608.266.6031

Forest Hill Cemetery
1 Speedway Rd., 608.266.4720



A Proud Division of
the City of Madison

TO: Michael Guns, Chief Financial Officer
Edgewood College

FROM: Kevin Briski, Parks Superintendent
Kay Rutledge, Parks Planning and Development Manager

DATE: April 8, 2014

SUBJECT: Edgewood Campus Plan (2219 Monroe St / 1000 Edgewood College Dr)

1. As previously approved by the Park Commission, Edgewood College will not be charged park impact fees for up to 300 additional residents as measured from the residential capacity at the time of the 1996 Edgewood Campus Master Plan. The number of residents in 1996 was 359. With the proposed Regina Hall addition, residential capacity on campus will increase to 663 residents, an increase of 304 residents above the 1996 capacity (park development impact fees will be due for the 4 units in excess of 300). The developer shall pay approximately \$1,325.92 for park development fees for 4 SRO units for the Regina Hall Addition.
2. Park impact fees (comprised of the Park Development Impact Fee per MGO Sec. 20.08(2) and the Parkland Impact Fee in lieu of land dedication per MGO Sec. 16.23(8)(f) and 20.08(6)) will be required for all future residential development as part of the campus plan. Park development impact fee credits have been fully utilized (see above). Currently an area in the northwest corner of the campus is identified as Athletic and Recreation Space on the 2014 Edgewood Campus Master Plan (243,064 sq ft). As long as this space remains as open recreational space for the campus, the parkland dedication requirement will continue to be met as previously approved by the Park Commission. Once these credits are exhausted, or if this space is utilized for other purposes, payment of parkland impact fees in lieu of dedication will be required.
3. Park impact fees will be determined when subsequent plans are submitted for review and approval. This development is within the Vilas - Brittingham impact fee district (SI27). Please reference ID# 14107 when contacting Parks.
4. Approval of plans for this project does not include any approval to prune, remove or plant trees in the public right-of-way. Permission for such activities must be obtained from the City Forester, 266-4816.

New Development (Regina Hall Addition):

Park development fees = (4 SRO @ \$331.48) = \$ 1,325.92

MF = 700 sq. ft. parkland dedication required per unit
E-SRO= 350 sq. ft. parkland dedication required per unit

Please contact Kay Rutledge @ 266-4714 or krutledge@cityofmadison.com or Sarah Lerner @ 261-4281 or slerner@cityofmadison.com if you have questions regarding the above items.

Standard Park Fees and Payments:

Based on the Existing Ordinance, new park fees will be in effect for all projects approved by the Common Council after January 1, 2014.

The Park Development Impact Fee will increase based on the Construction Cost Index increase of 2.72% from Dec. 2012 to Dec. 2013. The new fees are:

SF single family or duplex unit up from **\$1003.96 (2013)** to **\$1,031.27**

MF multifamily unit up from **\$645.40 (2013)** to **\$662.95**

E-SRO elderly or rooming house unit up from **\$322.70 (2013)** to **\$331.48**

Parkland Impact Fee (Fee in Lieu of Dedication) is based on current property values up to a maximum. The **maximum** rate for fee in lieu of dedication increases 5%, from \$2.4433412 (rounded to **\$2.44** for 2013) to \$2.5655083 (rounded to **\$2.57** for 2014).

Max fee in lieu per unit: SF = 1100 sq.ft. @ \$2.57 = \$2,827.00

MF = 700 sq.ft. @ \$2.57 = \$1,799.00

E-SRO= 350 sq.ft. @ \$2.57 = \$899.50

Total combined fees: SF = **\$3,858.27**
MF = **\$2,461.95**
E-SRO = **\$1,230.98**

Parkland impact fees and park development impact fees shall be paid for this project. Payment checks shall be payable to the City of Madison Treasurer. All questions, payments and deliveries shall be made to the office of the Madison Parks Division. Prior to City signoff on this project, the developer shall select one of the following options for paying these fees:

1. Payment of all fees in a lump sum prior to City signoff on the project.
2. When fees exceed \$20,000, the developer may pay half the fees and provide a two-year letter of credit at no interest for the remaining half of the fees, both prior to City signoff.
3. When fees exceed \$50,000 for plats being built with phased subdivision improvement contracts, the developer may pay the fees due for the number of units in each contract phase, paid at the time of contract execution, and at the fee rates then in effect. Under this option, the fees shall be calculated and prorated to each lot on the development, and the developer shall record a notice of the outstanding impact fees for each lot prior to receiving City signoff for the project.

4. The Developer has elected to defer the payments until such time as the building permits are applied for, with fees due and payable at the time building permits are issued. The following shall be required prior to sign off of the project:

a) The Developer shall execute a Declaration of Conditions, Covenants and Restrictions and an Impact Fee Schedule for all lots with outstanding fees due, which shall be recorded at the Dane County Register of Deeds and will serve as notification for future lot owners of the fees that are due and payable upon issuance of any building permit.

b) All outstanding park development impact fees are indexed each year at the rate established by the Construction Cost Index, per the Madison General Ordinance Chapter 20. All outstanding fee in lieu of dedication parkland impact fees will increase by 5% each year, per the Madison General Ordinance Chapter 20.

c) The Developer shall put the following note on the face of the subdivision plat/CSM or development plans:

LOTS / BUILDINGS WITHIN THIS SUBDIVISION / DEVELOPMENT ARE SUBJECT TO IMPACT FEES THAT ARE DUE AND PAYABLE AT THE TIME BUILDING PERMIT(S) ARE ISSUED.

A.7

EDGEWOOD (PARK & PLEASURE) DRIVE EASEMENT AGREEMENTS

Original Easement Agreement from 1903
Amendment from 1997
Amendment from 2008

office of clerk of District Court in Hennepin Co. Minn.
Jan 15th 1903 in book X. page 286.

H. E. Sessions.

Recorded June 5th 1905 at 10 o'clock A. M.

263358a

This Agreement made this 30th day of March, 1904, by and between the Madison Park + Pleasure Drive Association, a public corporation organized under and according to the laws of the State of Wisconsin, party of the first part and the St. Clara College, a corporation organized under the laws of the state of Wisconsin, party of the second part as follows:

Whereas it is proposed by said party of the first part to secure, for the purpose of a public park, title to the following described premises situate and lying in the County of Dane and State of Wisconsin, to wit: commencing at the center line of Warren street at the edge of Lake Monona, and extending thence north along the center line of Warren street to the center line of Drake street, thence west along the center line of Drake street to the center line of Garfield street, thence north along the center of Garfield street to the center line of Grant street, thence northwest along the center line of Grant street to the center line of Jackson street, thence southwesterly along the center line of Jackson street to the center of Edgewood Avenue, thence along the center of said Edgewood Avenue to Lake Monona, and thence along the edge of Lake Monona to the point of beginning, all in what is known as the Monona Park Subdivision to the City of Madison, and according to the recorded plat thereof, and now a part of said city,

existing therefrom, however, lots one to six, inclusive, in block twenty two, and lots one to six, inclusive, in block twenty three, up to and including the northwesterly line of the alley lying to the rear end of said blocks, and.

Whereas it is proposed to raise by private subscription the sum of not less than ten thousand dollars with which to improve the lands above described for park purposes and making additions thereto upon the margin of Lake Wingra lying to the south of said lands above described, and,

Whereas said Association has heretofore caused to be prepared a hydrographic map of said Lake Wingra, which shows the margin of said lake, the line dividing the clear water from the marsh or bog around said lake, and the depth of the water in said lake, a copy of which map has heretofore been furnished by said party of the first part to said party of the second part, upon which map is indicated the distance to which said proposed improvement of said bog or marsh lying south of the land above described is to be made by said Association; and

Whereas, said party of the second part is the owner of some forty six acres of land, or more, lying in the northwest quarter of section twenty seven, township seven, north, of range eight east, in said Dane County, which land adjoins said Wingra Park plat at the southwesterly side or end of said plat, and also adjoins Lake Wingra on the southeasterly side thereof, and lies between said Wingra Park plat on the northeast, and the road to the southwest, which road extends from the so called Monroe road, in said Dane County, in a southeasterly direction to Lake Wingra between lands owned by said party of the second part and those owned by Mrs. Chase and others;

Now, Therefore, upon the obtaining by said party of the first part of good title to the lands first above described as and for the purposes of a public park, and upon the expending in the improvement thereof, as above indicated, of a sum not less than ten thousand dollars, the party of the second part hereby agrees to convey, by deed, to said party of the first part, a perpetual right of way or easement for drive-way and parking purposes only, over, in and to a strip of ground three rods in width across the land above described so owned by the party of the second part, to be held by said

party of the first part in trust for the people of the city of Madison, according to the terms and provisions of chapter 55 of the laws of 1899, for park and pleasure drive purposes only, the center line of said strip of land being described as follows to wit: commencing at a point in the center of Edgewood Avenue, eighty-four feet south from the center line of Jackson street, said eighty-four feet being measured along the center line of Edgewood Avenue, and running thence across said land so owned by said party of the second part, along the edge of the bank thereof, to the northeasterly side of said road which so extends, as above stated, from said main road southeast to the edge of Lake Wingra, said center line to meet said northeasterly side of said road at a point ninety five feet northwest from the corner post in the fence next the edge of said lake, measured along the line of the fence on the northeasterly side of said road so extending from the Monroe road to said lake Wingra, said center line of said three rod strip across said land between the points above named to be twenty four feet and nine inches southeast from certain stakes set at different points across said land on the 27th day of March, 1904, by parties representing both the party of the first part and the party of the second part hereto, the said distance of twenty four feet and nine inches to be measured in each case at right angles to the said center line, at the point where any such stake or stakes were so set, it being intended that the stakes herein referred to are those which indicate the outer or northwesterly side of said three rod strip of land. In case it should be desired by the parties hereto, at any time hereafter, and before a deed is given, as hereinafter provided, to change or modify the location of said three rod strip of ground, such change or modification is to be made upon the agreement of R. M. Bashford and Sister Bertha, representing the party of the second part, and John M. Ulin, representing the party of the first part. Before any conveyance is made, as hereinafter provided, of a right of way or easement in, to or over said three rod strip of land, an accurate survey shall be made of said three rod strip of land by some competent surveyor.

and the description thereof, as established by said surveyor, shall be incorporated in such conveyance.

This agreement to convey said right of way or easement in, over and to said three rod strip of land is made upon the following express conditions, all of which must be fully complied with before a deed of said right of way or easement is executed and delivered.

Said Association in improving the marsh or bog lying south of the land first above described, shall make such improvements in such manner as not to dam up the water upon the adjoining land owned by said party of the second part, such improvement to be so made by said party of the first part as to furnish as good drainage to the adjoining land so owned by the party of the second part as such lands now have.

Said Association agrees that before constructing any drive way through said three rod strip of land and before using or improving the same in any way for park purposes, it will construct on each of the outer edges of said three rod strip, or on one edge thereof, as said party of the second part may dictate, a neat and substantial wire fence with turned and painted cedar posts, such fence to be as good, if not better, than the fence constructed by said Association on what is known as the Mndota Hospital grounds, in said Dane County, in the year 1897, and to be not less than five feet in height, such fence to be perpetually maintained at the expense of the party of the first part.

There shall be at least one gate constructed in said fence at such point as said party of the second part may select or indicate, of sufficient width to permit teams to pass across said three rod strip of land to and from said lake, and also, at the option of the said party of the second part, said party of the first part agrees to construct one suitable gate in said fence for the passage of persons to and from said lake across said three rod strip of ground.

Said Association also agrees to construct at such point as said party of the second part may select, an underground passageway for cattle and horses of sufficient size to permit the free and safe passage of such stock under said three rod strip of ground to and from said lake, and further agrees to build a fence out from either side of said passageway into the lake of sufficient height and

construction in other respects so as to furnish a yard of sufficient area and covered by sufficient depth of water to afford a reasonable watering place for stock.

Said Association further agrees that it will, at the option of said party of the second part, construct an underground passageway; under said three rod strip of land, for the passage of persons to and from said lake under said strip of land, which passageway shall be of neat and artistic design and constructed of either split boulders or some other equally suitable material, such passageway to be perpetually maintained at the expense of said Association.

Said deed of said right of way or easement over, in and to said three rod strip of ground shall contain the further condition that should said land ever be devoted by said party of the first part, or its successors or assigns, to any other use than park and pleasure driving purposes, then, and in that event, the same shall revert to and become the property of the said party of the second part.

Said party of the first part further agrees that it will, without cost or expense to said party of the second part, at the same time that it secures a plan for the improvement of the bog or marsh land south of the land first above described by some competent landscape architect, have such architect prepare a plan for the proposed improvement of the bog or marsh lying south of the land so owned by the party of the second part between the hard land and the clear water line in said lake, and will furnish to said party of the second part a copy of such plan of proposed improvement for its consideration, and will thereafter consider with said party of the second part such proposed plan of improvement with a view of having such bog or marsh land improved in some suitable manner and in a way that will be just and equitable to the parties hereto.

This agreement shall bind the parties hereto, their successors and assigns.

In Witness Whereof, the said parties have caused these presents to be signed by their president and
and the corporate

seals affixed, this 30 day of March, 1904.
 Madison Park + Pleasure Drive Association

By John M. Olin (seal)

Witnesses to signatures

Charles N. Brown
 President
 Secretary

of parties of the first part

to A. Avery

and A. Hankey

Signed, sealed and delivered

in presence of

Peter Connor

Blanche Delany

St. Clara College

By Emily Power

Bonaventura Tracy
 President
 Secretary



Recorded March 18-1905 at 4 o'clock P.M.

#265292A

For Value Received, we Freeman R. Lyon and
 Charles W. Lyon, of the Town of Waukegan, Kane
 County, Wisconsin, do hereby assign to the Stoughton
 State Bank, of Stoughton, Wisconsin, all of the income
 which contains contract made and

**DEED OF EASEMENT FROM EDGEWOOD,
INCORPORATED TO THE CITY OF MADISON
AMENDING THE ORIGINAL AGREEMENT
REGARDING EDGEWOOD DRIVE**

WHEREAS, Edgewood, Incorporated, a Wisconsin corporation, hereinafter called the Grantor, is the owner in fee of that certain parcel of land situated in the City of Madison, County of Dane, State of Wisconsin, more particularly described as follows:

A parcel of land located in part of the fractional Northwest 1/4 of Section 27 and part of Government Lot 1 (being the fractional East 1/2 of the Northeast 1/4) of Section 28, Town 7 North, Range 9 East, City of Madison; Dane County, Wisconsin, to-wit: Commencing at the most westerly corner of a parcel defined in a Trustee Deed recorded in Volume 2723 of Records on Page 74 as Document No 1703375: thence S43°15'00"E, along the Southwesterly edge of said parcel 297.9 feet to the point of beginning; thence continuing S43°15'00"E, 49.50 feet; thence S47°04'24"W, 360.98 feet; thence S43°13'27"W, 191.21 feet; thence S39°00'56"W, 588.81 feet; thence S42°09'03"W, 187.61 feet; thence S60°07'28"W, 288.20 feet; thence S77°28'38"W, 330.28 feet to the centerline of Woodrow Street; thence N07°43'17"W, along said centerline, 49.67 feet to a point that is 1447.40 feet southeasterly of, measured along said centerline from, the southeasterly right-of-way of Monroe Street; thence N77°28'38"E, 318.57 feet; thence N60°07'28"E, 272.81 feet; thence N42°09'03"E, 178.43 feet; thence N39°00'56"E, 589.27 feet; thence N43°13'27"E, 194.70 feet; thence N47°04'24"E, 362.37 feet to the point of beginning. Containing 96,615 square feet; and hereinafter called "Grantor's Property" or "the Easement"; and

WHEREAS, Edgewood Drive, located on the above-described Grantor's Property and the adjacent property of the Shirley A. Kubly Trust, between Woodrow Street and Edgewood Avenue in the City of Madison, Dane County, Wisconsin, was established as a park and pleasure drive, pursuant to the terms of that certain Agreement between the Madison Park & Pleasure Drive Association and St. Clara College, dated March 30, 1904, and recorded March 18, 1905, in Volume 19 of Miscellaneous, at Page 440, as Document No. 203358a, in the Office of the Dane County Register of Deeds; and the City of Madison, a Wisconsin municipal corporation (hereinafter sometimes called Madison or the Grantee) and Grantor, respectively, are successors in interest to the original contracting parties; and

WHEREAS, the 1904 Agreement required that St. Clara College convey an easement for Edgewood Drive to the Madison Park & Pleasure Drive Association upon the completion of construction and compliance with other terms of the Agreement, and it has been previously established by the Wisconsin Supreme Court in St. Clara College v. City of Madison, 250 Wis. 538 (1947), that the said other terms of the Agreement were met by the Association and that Madison, as successor in interest to the Association, was entitled to receive the easement. However, no such easement has ever been conveyed; and

WHEREAS, Grantor, as successor in interest to St. Clara College, and Madison have expressed a desire to reaffirm the original intent of the 1904 Agreement, to update its maintenance provisions and recognize certain existing conditions, thereby requiring amendment of the 1904 Agreement to reflect such changes; and

**DANE COUNTY
REGISTER OF DEEDS**

0000271

Doc No 2855990

1997-05-23	10:48 AM
Trans. Fee	0.00
Rec. Fee	14.00
Pages	3

THIS SPACE RESERVED FOR RECORDING DATA

**RETURN TO: James M. Voss, Assistant City Attorney
Room 401, 210 Martin Luther King, Jr. Blvd.
Madison, Wisconsin 53710**

Tax Parcel No.: 0709-272-0099-2

WHEREAS, Grantor agrees to convey the required deed of easement and to amend certain substantive provisions of the 1904 Agreement in the following ways, while the 1904 Agreement remains in full force and effect, except as hereinafter set forth.


NOW, THEREFORE, IN CONSIDERATION OF THE PRIOR AGREEMENT AND CURRENT UNDERSTANDING OF THE PARTIES HERETO, THE GRANTOR, FOR ITSELF, ITS ADMINISTRATORS, SUCCESSORS AND ASSIGNS DOES HEREBY GRANT AND CONVEY UNTO THE CITY OF MADISON, HEREINAFTER CALLED THE GRANTEE, ITS SUCCESSORS AND ASSIGNS, FOR THE USE AND BENEFIT OF THE PUBLIC, AS FOLLOWS:


1. A perpetual easement and right of way over, in and to the Grantor's Property (hereinafter "the Easement") subject to those certain terms as set forth in the said 1904 Agreement (hereinafter the "Grant of Easement"); and further subject to the following covenants and conditions, as set forth hereinafter in numbered paragraphs 2 through 8, which amend the Grant of Easement and shall run with the land.
2. The Easement shall continue to be maintained by Grantee for the use and benefit of the general public, consistent with the Grant of Easement. Maintenance, improvement and reconstruction of the surface of the Easement by Grantee, consistent with the purposes of the Grant of Easement, shall be permitted to protect the health, safety and welfare of its users.
3. Grantee shall continue to maintain the existing Edgewood campus Easement line fences and to use steel posts and chain-link fabric, except that replacement fabric for large fence sections shall be as inconspicuous as is reasonably possible. Subject to reasonable notice in writing to Grantor, Grantee shall have the reasonable right of entry onto Grantor's adjacent Edgewood campus property as may be necessary for the maintenance and replacement of said fences.
4. Grantor shall continue to maintain the two existing former underground passageways only for surface water drainage and utility purposes. Where Grantor may need other surface drainage or utility crossings of the Easement, the location and construction details shall be by mutual agreement and Grantee's approval therefore shall not be unreasonably withheld.
5. Grantee will continue to maintain, regulate and enforce parking restrictions and traffic control, including but not limited to direction of traffic flow, on the Easement. Grantee may continue to implement traffic plans and controls to restrict the use of the Easement consistent with the purposes of the Grant of Easement.
6. The control and maintenance of all landforms, vegetation and improvements of the Easement by Grantee shall be permitted, consistent with a woodlands management plan to protect the health, safety and welfare of its users, such plan to be approved by Edgewood and the Madison Board of Park Commissioners, subject to appeal to the Common Council. Grantee shall have the right of entry onto adjacent Edgewood campus property of Grantor as may be reasonably necessary for exercise of such control and maintenance of said landforms, vegetation and improvements, subject to reasonable advance notice of such entry.
7. Grantor further specifically waives the right, if any, to invoke, in its favor and against the Grantee, the reversionary provision of the 1904 Agreement as it may pertain to Grantor's currently existing motor vehicle and pedestrian access points to the Easement which are hereby confirmed and which serve Grantor Edgewood's currently existing educational facilities and lawful uses.
8. The Deed of Easement shall become effective, after Grantee's agreement and acceptance are indicated below, when it is recorded in the office of the Register of Deeds for Dane County, Wisconsin.

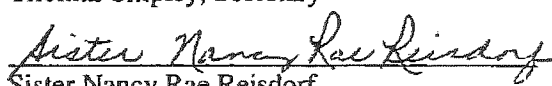
0000273

IN WITNESS WHEREOF, the Grantor has caused this Deed of Easement to be executed by its proper officers and its seal to be affixed as of this 22nd day of May, 1997.

EDGEWOOD, INCORPORATED


James A. Ebben, President


Thomas Shipley, Secretary


Sister Nancy Rae Reisdorf

AUTHENTICATION

Signatures of James A. Ebben, President, Thomas Shipley, Secretary and Sister Nancy Rae Reisdorf of Edgewood, Incorporated, authenticated this 22nd day of May, 1997.


Harry B. Gempeler
Member of the State Bar of Wisconsin

The foregoing Deed of Easement and amendments to 1904 Agreement agreed and accepted this 22nd day of MAY, 1997.

CITY OF MADISON


Susan J. M. Bauman, Mayor


Ray Fisher, City Clerk

AUTHENTICATION

Signatures of Susan J. M. Bauman, Mayor, and Ray Fisher, City Clerk, of the City of Madison authenticated this 22nd day of MAY, 1997.


James M. Voss, State Bar # 01014000
Member of the State Bar of Wisconsin

This instrument was drafted by James M. Voss.

**FIRST AMENDMENT TO DEED OF EASEMENT
FROM EDGEWOOD, INCORPORATED TO
THE CITY OF MADISON AMENDING THE
ORIGINAL AGREEMENT REGARDING
EDGEWOOD DRIVE**

WHEREAS, Edgewood, Incorporated, a Wisconsin corporation, hereinafter called the Grantor, and the City of Madison, hereinafter called the Grantee executed that certain Deed of Easement from Edgewood, Incorporated to the City of Madison Amending the Original Agreement Regarding Edgewood Drive, hereinafter the Easement, recorded in the Office of the Dane County, Wisconsin Register of Deeds, on May 23, 1997, as Document No. 2855990; and

THIS SPACE RESERVED FOR RECORDING DATA
RETURN TO: James M. Voss, Assistant City Attorney
Room 401, 210 Martin Luther King, Jr. Blvd.
Madison, Wisconsin 53703

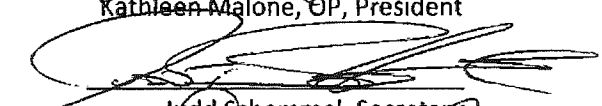
WHEREAS, Grantor and Grantee mutually agree that it is necessary and desirable to amend paragraph 7 of said Easement to provide for appropriate access across the existing Easement line fences, to improve pedestrian access for Edgewood and neighborhood use.

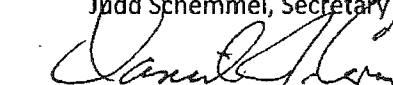
NOW, THEREFORE, THE GRANTOR AND GRANTEE HEREBY AGREE TO AMEND PARAGRAPH 7 OF THE SAID EASEMENT TO READ AS FOLLOWS:

7. Grantor further specifically waives the right, if any, to invoke, in its favor and against the Grantee, the reversionary provision of the 1904 Agreement as it may pertain to Grantor's currently existing motor vehicle and pedestrian access points to the Easement which are hereby confirmed and which serve Grantor Edgewood's currently existing educational facilities and lawful uses. In addition, the Grantor and Grantee may mutually agree to add new pedestrian access points, or modify or remove existing pedestrian access points to or across the Easement, as they deem necessary for the use and benefit of Edgewood and the public, without triggering or otherwise implicating the said reversionary provision.

IN WITNESS WHEREOF, the Grantor has caused this Deed of Easement to be executed by its proper officers and its seal to be affixed as of this 8th day of April, 2008.

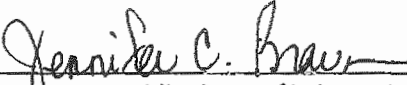

Kathleen Malone, OP, President


Judd Schemmel, Secretary

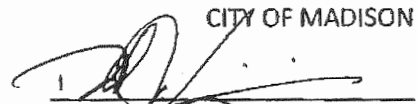

Daniel J. Carey, Treasurer

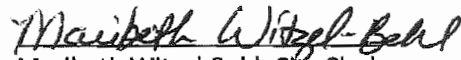
AUTHENTICATION

Signatures of Kathleen Malone, OP, President, Judd Schemmel, Secretary and Daniel J. Carey, Treasurer of Edgewood, Incorporated, authenticated this 8th day of April, 2008.


Jennifer C. Bauer
Notary Public, State of Wisconsin
My commission expires July 7, 2009

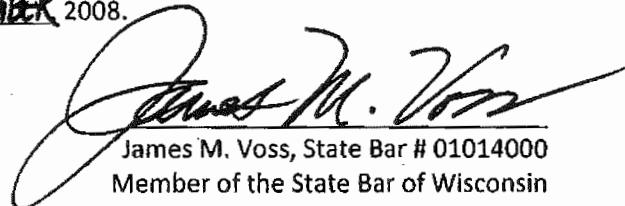
The foregoing First Amendment to Deed of Easement agreed and accepted this 26th day of December, 2008.


CITY OF MADISON
David J. Cieslewicz, Mayor


Maribeth Witzel-Behl, City Clerk

AUTHENTICATION

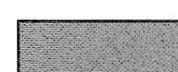
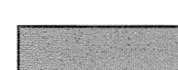

Signatures of David J. Cieslewicz, Mayor, and Maribeth Witzel-Behl, City Clerk, of the City of Madison authenticated this 26th day of DECEMBER, 2008.

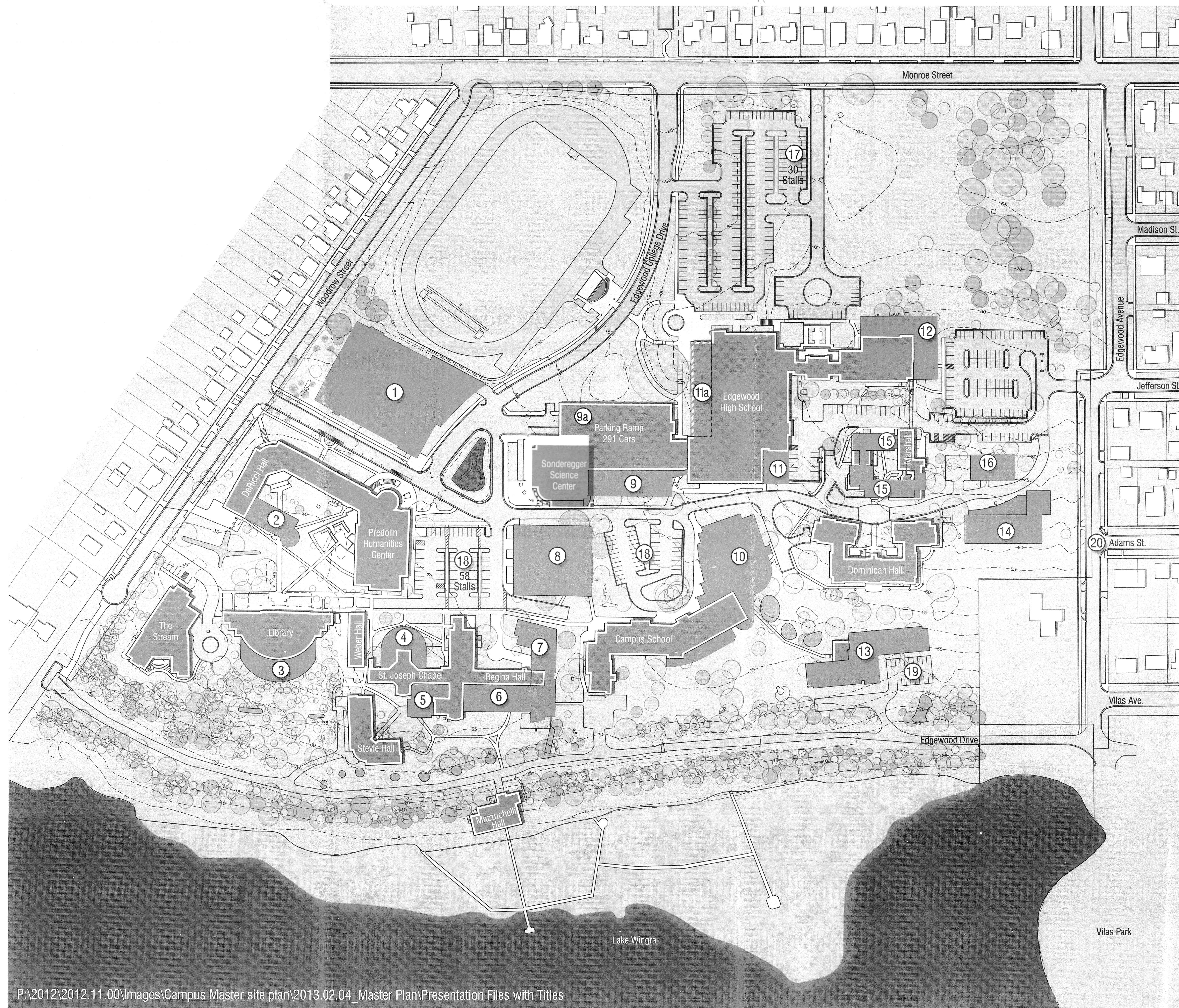
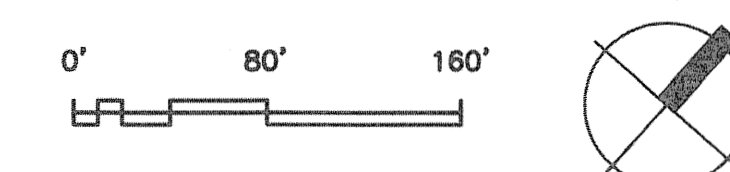

James M. Voss, State Bar # 01014000
Member of the State Bar of Wisconsin

This instrument was drafted by James M. Voss

Potential New Buildings or Additions

1. Future Facility & Structured Parking
2. DeRecci Hall Addition
3. Library Addition
4. Chapel Addition
5. Regina Western Addition
6. Dining Hall Addition
7. Regina Hall Eastern Addition
8. Edgedome Renovation or New Facility
9. Sonderegger Addition
- 9a. Addition to Parking Structure
10. Campus School Addition
11. High School Southern Addition
- 11a. High School Expansion over Existing Common Space
12. High School Eastern Addition
13. New Residential or Mixed Use to Replace Siena Hall
14. New Non-Residential Building
15. Marshall Hall Addition
16. New Non-Residential Building
17. Additional Parking
18. Revised Parking Layout
19. Revised Parking Layout
20. Existing Curb Cut

-  Existing Buildings
-  2010 Campus Plan Proposed Additions/Expansions
-  Native American Mound



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